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2009 Homeland Security Symposium & Exhibition

"Building a Resilient & Sustainable Homeland - Public and Private Sector Partners Serving America"

Arlington, VA

9 - 10 September 2009

Agenda

Wednesday, 9 September 2009

PANEL: Technology – Keeping up with the Requirements of Homeland Security/Homeland Defense Panel Members

- *Dr. Keith Harman*, Vice President, Engineering, Magal-Senstar Corp.
- Mr. Michael Toscano, Executive Director, Association for Unmanned Vehicle Systems International
- Mr. Douglas Cavileer, Director, Operations Division Combating Terrorism Technical Support Office
 1. Tilim on Batgalim Windows Media Audio/Video File
- Mr. Bernd (Bear) McConnell, Director of Interagency Coordination, NORAD & NORTHCOM

PANEL: U.S. Land Border Management: Today & Tomorrow Panel Members

- Ms. Colleen Manaher, Director, Western Hemisphere Initiative Program
 - 1. Western Hemisphere Initiative Windows Media Audio/Video file

PANEL: International Supply Chain Vulnerabilities

Panel Members

- Mr. Gary Gilbert, Senior Vice President, Hutchison Port Holdings
- Mr. Sam Banks, Executive Vice President, Sandler & Travis Advisory Services (former Deputy Commissioner, U.S. Customs Service)
- Mr. James Phillips, President & CEO, Canadian/American Border Trade Alliance

Thursday, 10 September 2009

PANEL: Securing Cyberspace and America's Cyber Assets: Threats, Strategies and Opportunities Panel Members

- Mr. Brian G. McGinley, Lead, BGM Risk Management Group (former Director of Deposit, Control & Loss Operations, Wachovia Corporation; Director of Risk Management & Control and Group Information Security Officer, Citigroup)
- Mr. Bob Dix, Vice President, Government Affairs & Critical Infrastructure Protection, Juniper Networks, Inc.

REMARKS

• MG Michael H. Sumrall, USA, Assistant to the Chairman, Joint Chiefs of Staff for National Guard Matters

PANEL: Selling Solutions in the Homeland Security Market Panel Members

- Mr. Daniel McLaughlin, Office of Procurement Operations, DHS
- <u>Dr. Tom Cellucci</u>, Chief Commercialization Officer, Science & Technology Directorate, DHS
- Ms. Courtney Fairchild, GSA Specialist, Global Services, Inc.



2009 HOMELAND SECURITY SYMPOSIUM & EXHIBITION

"Building a Resilient & Sustainable Homeland -Public and Private Sector Partners Serving America"

ONSITE AGENDA



CRYSTAL GATEWAY MARRIOTT, ARLINGTON, VA

SEPTEMBER 9-10, 2009

WEDNESDAY, SEPTEMBER 9, 2009

7:00 - 8:00 AM Registration & Continental Breakfast

8:00 - 8:15 AM Welcome & Opening Remarks

MG Barry D. Bates, USA (Ret), Vice President, Operations, NDIA

Mr. Richard B. Cooper, Principal, Catalyst Partners, LLC; HLS Division Chair

8:15 - 9:00 AM **Keynote Address**

Mr. David Heyman, Assistant Secretary for Policy U.S. Department of Homeland Security

9:00 - 10:30 AM Panel: Technology – Keeping Up with the Requirements of Homeland Security/

Public, private and research sector experts will share current and future advancements in key technology areas necessary to strengthen homeland security and homeland defense requirements. Successes, failures and on-going attempts to bring innovative solutions will also be shared.

Moderator: Mr. Mike Harper, President, Coquina Visions Consulting **Panel Members**

• Ms. Martha A. Karlovic, President, DATAUbiquity, LLC

• Dr. Keith Harman, Vice President, Engineering, Magal-Senstar Corp.

- Mr. Michael Toscano, Executive Director, Association for Unmanned Vehicle Systems International
- Mr. Douglas Cavileer, Director, Operations Division Combating Terrorism Technical Support Office
- Mr. Bernd (Bear) McConnell, Director of Interagency Coordination, NORAD & NORTHCOM

10:30 - 11:00 AM Networking Break in Exhibit Hall

11:00 - 12:15 PM Panel: U.S. Land Border Management: Today & Tomorrow

The panel will review current and future DHS activities necessary to address land border crossing volumes and the challenges in achieving and maintaining effective border management. An examination of the associated policies, programs and technologies will also be presented.

Moderator: Mr. Phlemon T. (PT) Wright, Director, Homeland Security, CSC **Panel Members**

- Ms. Colleen Manaher, Director, Western Hemisphere Initiative Program
- Mr. Shonnie Lyon, Acting Deputy Director, US-VISIT Program, DHS
- Mr. Pancho Kinney, Vice President, HNTB, Border Trade Alliance

12:15 - 1:30 PM Networking Lunch in Exhibit Hall

1:30 - 3:00 PM Panel: Federal Investments & Critical Infrastructure Resiliency

Critical infrastructure is essential to our economic success and security. While age, increasing demands and lack of upkeep all wear upon them, these structures are also vulnerable to threats from natural disasters, terrorism and other incidents. With new federal infrastructure investments being dispersed, the panel will explore what is being done to maximize the impact of these tax dollars to enhance infrastructure performance, reduce risks and enhance overall resilience.

Moderator: Mr. Mark Steiner, Senior Policy Director, American Council of Engineering Companies

Panel Members

• Mr. Edward Hecker, Chief, Office of Homeland Security, U.S. Army Corps of

Engineers

- MĞ James L. Snyder, USA (Ret), Deputy Assistant Secretary for Infrastructure Protection, DHS
- Secretary Pierce R. Homer, Secretary of Transportation, Office of the Governor, VA
- Dr. Michael Chipley, BRAC Coordinator, Alexandria Economic Development Partnership, Inc.
- Mr. Chris Voss, Director, Office of Emergency Management and Homeland Security, Montgomery County, MD

3:00 - 3:30 PM

Networking Break in Exhibit Hall

3:30 - 5:00 PM

Panel: International Supply Chain Vulnerabilities

The assembled panel of experts will offer an assessment of the current threats and vulnerabilities to existing supply chains; recent changes to include process and technology implementation, the global ramifications from increased supply chain scrutiny and emerging government and industry initiatives to ensure commerce while sustaining security operations.

Moderator: Mr. Robert W. Kelly, Principal, CenTauri Solutions **Panel Members**

- Mr. Gary Gilbert, Senior Vice President, Hutchison Port Holdings
- Mr. Sam Banks, Executive Vice President, Sandler & Travis Advisory Services (former Deputy Commissioner, U.S. Customs Service)
- Mr. James Phillips, President & CEO, Canadian/American Border Trade Alliance

5:00 - 6:30 PM

Networking Reception in Exhibit Hall

THURSDAY, SEPTEMBER 10, 2009

7:00 - 8:00 AM

Registration & Continental Breakfast

8:00 - 8:15 AM

Introductory Remarks

Mr. Richard B. Cooper, Principal, Catalyst Partners, LLC; HLS Division Chair

8:15 - 9:00 AM

Keynote Address

Rep. Henry Cuellar (D-TX), Chairman, Subcommittee on Emergency Communications, Preparedness and Response Subcommittee, U.S. House of Representatives

9:00 - 10:30 AM

Panel: Securing Cyberspace and America's Cyber Assets: Threats, Strategies and Opportunities

The panelists will discuss the Comprehensive National Cybersecurity Initiative including the separation of duties between those taken by DHS, DOD, the NSA and the private sector. Additional subjects will include: technological and strategic approaches to securing systems and networks; public-private collaboration; and maintaining privacy and data integrity.

Moderator: Mr. Samuel S. Visner, Vice President, Strategy and Business Development for Enforcement, Security and Intelligence Division, CSC **Panel Members**

- Mr. Greg Schaffer, Assistant Secretary of Cyber Security and Communications, DHS
- Mr. Brian G. McGinley, Lead, BGM Risk Management Group (former Director of Deposit, Control & Loss Operations, Wachovia Corporation; Director of Risk Management & Control and Group Information Security Officer, Citigroup)
- Mr. Bob Dix, Vice President Government Affairs & Critical Infrastructure Protection, Juniper Networks, Inc.

10:30 - 11:00 AM Networking Break in Exhibit Hall

11:00 - 12:00 PM **Remarks**

MG Michael H. Sumrall, USA, Assistant to the Chairman, Joint Chiefs of Staff for National Guard Matters

12:00 - 1:30 PM Networking Lunch in Exhibit Hall

Last Chance to View Exhibits

1:30 - 3:15 PM Panel: Selling Solutions in the Homeland Security Market?

Public and private sector experts will address key market and product development questions, "How do I get my product/service procured in the homeland security market; What programs are available to assist, etc.?" Additional topics presented will include the DHS High Priority Technology Needs; long range broad area announcements; funding from Congress; the Authorized Equipment List (AEL); SAFETY Act; SBIR funding; and more.

Moderator: Dr. David McWhorter, Principal, Catalyst Partners, LLC **Panel Members**

• Mr. Daniel McLaughlin Office of Procurement Operations, DHS

 Dr. Tom Cellucci, Chief Commercialization Officer, Science & Technology Directorate, DHS

• Mr. Robert P. Crouch, Jr., Assistant to the Governor for Commonwealth Preparedness, Commonwealth of Virginia

• Ms. Courtney Fairchild, GSA Specialist, Global Services, Inc.

• Mr. Lee Moss, Director, Global Security Systems Business Development, The Boeing Company

• Mr. Peter Kant, Vice President, Global Government Affairs, Rapiscan Systems, Inc.

3:15 - 3:30 PM Networking Break in Foyer

3:30 - 5:00 PM Panel: Ask the Experts

A panel of procurement, acquisition and grant experts will address questions from the audience and offer first-hand insights on prospective opportunities and steps to success.

Moderator: Dr. David McWhorter, Principal, Catalyst Partners, LLC **Panel Members**

Mr. Daniel McLaughlin, Office of Procurement Operations, DHS

• Dr. Tom Cellucci, Chief Commercialization Officer, Science & Technology Directorate, DHS

• Mr. Robert P. Crouch, Jr., Assistant to the Governor for Commonwealth Preparedness, Commonwealth of Virginia

• Ms. Courtney Fairchild, GSA Specialist, Global Services, Inc.

5:00 PM Conference Wrap-up & Adjournment



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2009 HOMELAND SECURITY SYMPOSIUM & EXHIBITION



This Briefing is Classified UNCLASSIFIED

United States Northern Command

PANEL 2 – INTEGRATING
TECHNOLOGY AND CONNECTING
COMMUNITIES

Bear McConnell Director, Interagency Coordination

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UNCLASSIFIED

Who we are....what we do

- North American Aerospace Defense Command (NORAD)
- United States Northern Command (USNORTHCOM)

NORAD (bi-command)

- Aerospace Warning
- Aerospace Control
- Maritime Warning

USNORTHCOM

- Homeland Defense
- Civil Support



NORTHCOM MISSION STATEMENT

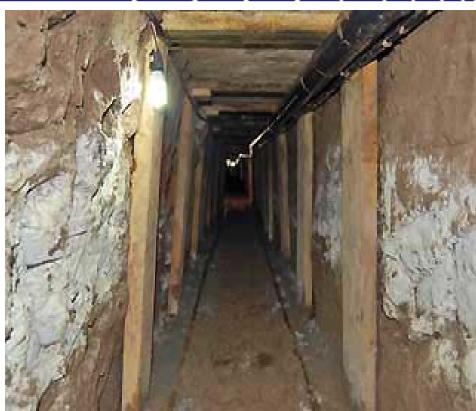
USNORTHCOM <u>anticipates</u> and <u>conducts</u>
Homeland Defense and Civil Support
operations within the assigned area of
responsibility to defend, protect, and secure
the United States and its interests



Operational Challenges

- Ongoing existence, use, and construction of cross-border tunnels represent persistent and growing threats to the homeland.
- Asymmetric enemies demonstrate everevolving abilities to construct tunnels to gain access and transport illegal drugs, people, and, potentially, weapons of mass destruction into the continental United States.





- 110 cross-border tunnels found since 1990
- 24 discoveries by LEAs in CY 2008
- Increase in tunnel construction is likely a result of increased CBP presence and effectiveness against traditional mobility corridors into the homeland.



Counter-Tunnel Operations

- N-NC seeks to solidify strategic, operational and tactical level partnerships with the Department of Homeland Security and other agencies.
- Many HLD/HLS vulnerabilities require interagency interaction, collaboration, shared energy and resources.
- The U.S./Mexico tunnel problem presents an opportunity to create an exemplary working model of interaction between N-NC, DoD, DHS, and DOJ with eventual expansion internationally to Mexican and Canadian authorities UNCLASSIFIED





Tunnel Detection Stakeholders

LAW ENFORCEMENT

- BORDER PATROL
 - CBP
 - ICE
 - DEA
 - ATF
- US ATTY OFFICE
 - STATE LEAS



MILITARY

- OSD /AS&C
- US NORTHCOM
- JTF-NORTH
- US CENTCOM
- USFK
- USACE-ERDC
- OSD/JGRE
- NUWC
- TSWG



INDUSTRY & ACADEMIA

- FLIR
- Lockheed Martin
- Stolar Research Corp
 - BBN Technologies
 - AT&T
 - Foster Miller
 - QinetiQ
 - Georgia Tech
 - SMU
 - CSM
 - KGS



- DHS S&T
 - DIA
 - USGS
- CBP LABS
- NATIONAL LABS





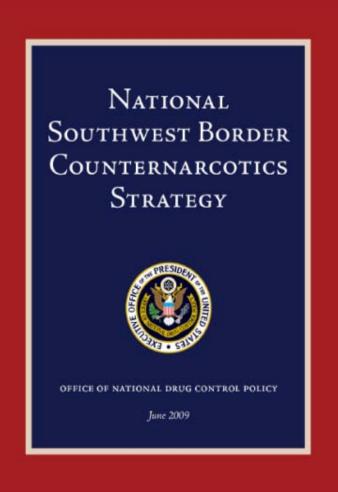


N-NC Long-Term Strategy

- Advocate for cooperative technologies effort
- Leverage intersection of military and HLS capability need
- Identify test platform location to validate technologies (a dedicated site)
- Advocate for long-term preventative solutions.
- Synthesis of interagency requirements, capabilities and technology development
- Wed technology efforts with increased training, intelligence gathering and synthesis capabilities



Tunnel Detection in National Strategy



Report Excerpt

"...this strategy supports the collective interagency effort to end the construction and use of tunnels and subterranean passageways for the purpose of smuggling illegal drugs into the United States. ...terrorists have the potential to use ...tunnels -- to move illegal contraband, personnel, and money across borders, it is essential that tunnels be viewed as a unique and growing threat to the homeland."

"The interagency will continue to synchronize its collective efforts to:

- 1) conduct research and development, which leads to better tunnel detection capabilities;
- 2) improve the collection and sharing of tunnel related information and intelligence, both within the U.S. interagency community and between U.S. authorities and their Mexican counterparts; and
- 3) establish and execute joint initiatives with Mexico directed at ending the construction and use of tunnels under the Southwest border.



N-NC IC Directorate Bumper Sticker

When You Need a Friend, It's Too Late to Make One!

NATIONAL DEFENSE INDUSTRIAL ASSOCIATION Homeland Security Symposium



Securing Cyber Space & America's Cyber Assets: Threats, Strategies & Opportunities

September 10, 2009, Crystal Gateway Marriott, Arlington, Virginia

Securing Cyber Space & America's Cyber Assets: Threats, Strategies & Opportunities

- IT SCC- IT Sector Baseline Sector Risk Assessment
- Comprehensive National Cybersecurity Initiative- Project 12
- National Security Telecommunications Advisory Committee:
 Cybersecurity Collaboration Task Force
- President's 60-Day Cybersecurity Policy Review
- National Cyber Incident Response Plan / Framework
- Cyber Storm III



The IT Sector Baseline Risk Assessment (ITSRA)



- The IT Sector Baseline Risk Assessment (ITSRA) is the result of unprecedented partnership among government and industry entities who engaged in a collaborative and iterative process to assess risk to critical IT Sector functions
- Conducted in support of the National Infrastructure Protection Plan (NIPP)
 - Sharing expertise allows for the accurate execution and refinement of the risk assessment methodology
 - Sharing information enhances the prevention, protection, response, and recovery from events that impact the Sector
- The IT Sector established a working group—the Risk Assessment Committee (formerly the Critical Functions and Information Sharing Working Group)—to coordinate and lead the IT Sector's risk assessment efforts
 - Co-chaired by representatives of the Department of Homeland Security's National Cyber Security
 Division and IT Sector Coordinating Council
 - Participation was conducted under the auspices of the Critical Infrastructure Protection Advisory Council (CIPAC) framework



ITSRA Scope: Analyze risks to critical IT Sector functions

- Focuses on Critical IT Sector Functions that are essential for national security, economic security, public health and safety, government services and the operation of other critical infrastructures
- DOES NOT focus on attacks against individual networks, systems, or information theft
- All-hazards risk assessment that provides an evaluation of IT Sector threats, vulnerabilities, and consequences and informs the development of strategies to mitigate sector-wide risks
- An initial baseline that provides the foundation for future enhancements
- The critical IT Sector functions are:
 - Produce and provide IT products and services
 - Provide incident management capabilities
 - Provide domain name resolution services
 - Provide identity management and associated trust support services;
 - Provide Internet-based content, information, and communications services
 - Provide Internet routing, access, and connection services



ITSRA: A major accomplishment of the NIPP Partnership Model

- Validated the IT Sector's functions-based risk assessment approach
- Affirmed the resilience and redundancy of the infrastructure
- Identified significant interdependencies within functions
- As an example: Incident management depends on the availability of the Internet Content function
- Although several risks were identified throughout the critical functions, it is unlikely that any of these risks would lead to the complete failure of that function



National Cyber Security Initiative will have a dozen parts

- **Trusted Internet Connection**
- Intrusion detection
- **Intrusion prevention**
- Research and development
- Situational awareness, specifically through the National Cyber Security Center, which will coordinate information from all agencies to help secure cyber networks and systems and foster collaboration
- Cyber counter intelligence
- Classified network security
- Cyber education and training
- Implementation of information security technologies
- **Deterrence strategies**
- Global supply chain security
- **Public/private collaboration**



The President's National Security Telecommunications Advisory Committee (NSTAC)



Cybersecurity Collaboration Report

Strengthening Government and Private Sector Collaboration Through a Cyber Incident Detection, Prevention, Mitigation, and Response Capability

May 2009



The White House Releases the 60-Day **Cyber Security Review**

CYBERSPACE POLICY REVIEW

Assuring a Trusted and Resilient Information and **Communications Infrastructure**



Cyber Security Review: Near-term action plan

- 1. Appoint a cybersecurity policy official responsible for coordinating the Nation's cybersecurity policies and activities; establish a strong NSC directorate, under the direction of the cybersecurity policy official dual-hatted to the NSC and the NEC, to coordinate interagency development of cybersecurity-related strategy and policy.
- 2. Prepare for the President's approval an updated national strategy to secure the information and communications infrastructure. This strategy should include continued evaluation of CNCI activities and, where appropriate, build on its successes.
- 3. Designate cybersecurity as one of the President's key management priorities and establish performance metrics.
- 4. Designate a privacy and civil liberties official to the NSC cybersecurity directorate.
- 5. Convene appropriate interagency mechanisms to conduct interagency-cleared legal analyses of priority cybersecurity-related issues identified during the policy-development process and formulate coherent unified policy guidance that clarifies roles, responsibilities, and the application of agency authorities for cybersecurity-related activities across the Federal government.
- 6. Initiate a national public awareness and education campaign to promote cybersecurity.
- 7. Develop U.S. Government positions for an international cybersecurity policy framework and strengthen our international partnerships to create initiatives that address the full range of activities, policies, and opportunities associated with cybersecurity.
- 8. Prepare a cybersecurity incident response plan; initiate a dialog to enhance public-private partnerships with an eye toward streamlining, aligning, and providing resources to optimize their contribution and engagement
- 9. In collaboration with other EOP entities, develop a framework for research and development strategies that focus on game-changing technologies that have the potential to enhance the security, reliability, resilience, and trustworthiness of digital infrastructure; provide the research community access to event data to facilitate developing tools, testing theories, and identifying workable solutions.
- 10. Build a cybersecurity-based identity management vision and strategy that addresses privacy and civil liberties interests, leveraging privacy-enhancing technologies for the Nation.

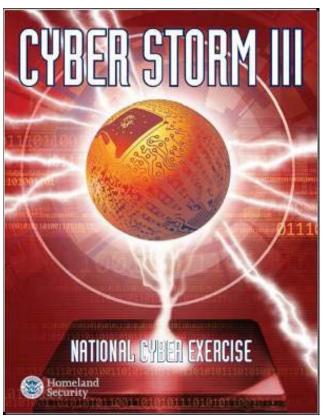
Creating effective information sharing and incident response

- 8. Prepare a cybersecurity incident response plan; initiate a dialog to enhance public-private partnerships with an eye toward streamlining, aligning, and providing resources to optimize their contribution and engagement
- Build a Framework for Incident Response
- Enhance Information Sharing To Improve Incident Response Capabilities



DHS' Cyber Storm III to test Obama's national cyber response plan

National Cyber Storm III Exercise September, 2010





Securing Cyber Space & America's Cyber Assets: Threats, Strategies & Opportunities

Robert B. Dix, Jr.

Vice President

Government Affairs & Critical Infrastructure Protection

Juniper Networks 571-203-2687

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Information Security & Cyber Threats to the Private Critical Infrastructure and Financial Services

Trends & Implications for the Public and Private Sectors

Session: Securing Cyberspace & America's Cyber Assets: Threats, Strategies & Opportunities

September 10, 2009

Presenter:

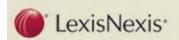
Brian McGinley

Principal

BGM Risk Management Group

"it" happens every day.....

From Talkleft.com 3/9/05



Lexis-Nexis Database Hacked, Customer Files Accessed

Choice Point is not alone. LexisNexis, through its parent company, Reed Elsevier, announced today that a database it acquired from Seisint has been hacked and up to 32,000 files with personal information have been breached.

DSW Data Theft Much Larger Than Estimat

Tue Apr 19,10:05 PM ET



COLUMBUS, Ohio - Thieves who accessed a DSW Shoe Warehouse database obtained 1.4 million credit card numbers and the names on those accounts — 10 times more than investigators estimated last month.

Phishers point scam at Apple's iTunes

Music store users targeted for the first time by sophisticated ID theft, says Proofpoint

By Gregg Keizer

May 20, 2008 (Computerworld) Phishers have targeted users of Apple Inc.'s iTunes music store with sophisticated identity theft attacks for the first time, a security company said today.



Credit Card Breach Raises Broad Concerns

By THE ASSOCIATED PRESS Published: March 23, 2008

PORTLAND, Maine (AP) — When up to 4.2 million account numbers were stolen over three months by thieves who cracked computers at

Sears sued over privacy breach

Class-action lawsuit seeks damages and wants Sears to determine whether its Managemyhome Web site was misused by criminals

By Robert McMillan, IDG News Service January 08, 2008



Burned By ChoicePoint Breach, Potential ID Theft Victims Face a Lifetime of Vigilance

Feb. 24, 2005

More than 9.9 million Americans were victims of identity theft last year. Many victims are dumbfounded by the dearth of federal and state laws aimed at protecting their credit histories and other information about them.

By Rachel Konrad, AP Technology Writer

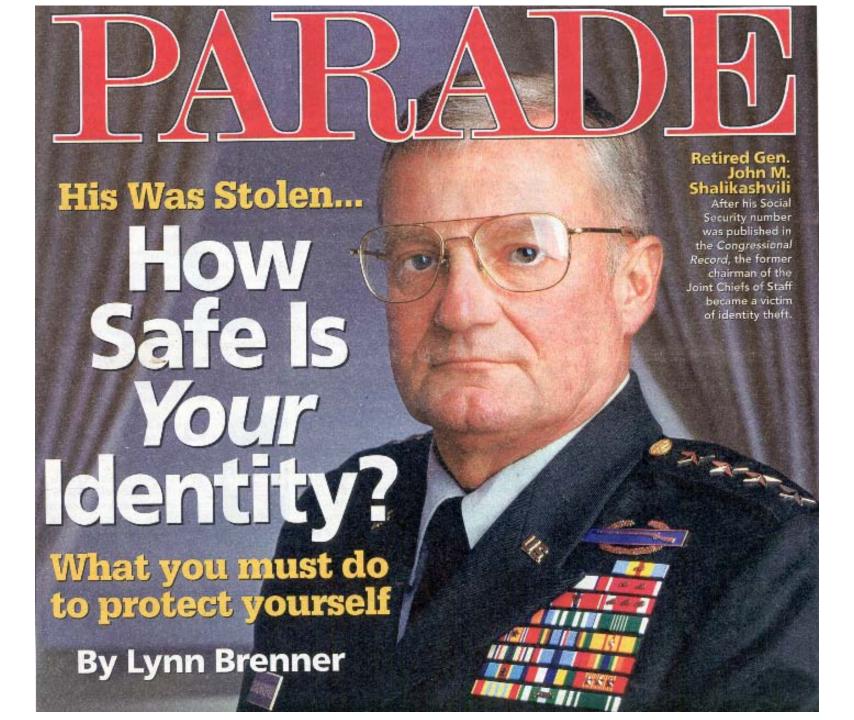
Boeing laptop theft puts U.S. data breach tally over 100M

A privacy group has kept tabs on incidents since February 2005

Robert McMillan Today's Top Stories • or Other Security Stories •

December 15, 2006 (IDG News Service) -- A stolen laptop at The Boeing Co. has pushed a widely watched tally of U.S. data breach victims past the 100 million mark.

On Tuesday, Boeing disclosed that files containing Social Security numbers, names and home addresses of 382,000 current and former employees were compromised in early December when an unencrypted laptop was stolen from an employee's car.



Fraud Trends / Privacy at Risk – Information Under Attack

•Consumer and Business Information has become a "Criminal Commodity" wherein its value and market for open exchange has increased to unprecedented scale. Information has become the currency and enabler of FRAUD

The reason?

•Information = Transactional Access in the financial services' world – and it is all about the MONEY!

- •Internal data compromise
- External data compromise

Consumer information and privacy is under siege by individuals who are able to gain access to personal biographic, demographics and financial information via theft of trash, internet, public record sources, compromise of non-public sources via hacking and/or "social engineering" & corruption of individuals with access to the information.

Where we sit today:

Banking & Finance; Telecommunications; Energy & Water; Transportation, Healthcare as U.S. Critical Infrastructure are often similarly positioned:

- Don't go to Fort Knox or the Federal Reserve looking for our Nation's wealth – we have truly become a "Digital Economy"
- We have all moved from "Computer Assisted to Computer Dependent" internally and externally
- Large complex, distributed networks and applications many "cobbled" together from merger & acquisitions from disparate, antiquated legacy systems – many serviced remotely and many by third party service providers
- Collect, Store, and Transmit sensitive and confidential data including:
 - Customers/Clients/Employees/Vendors
 - Business Data containing our key strategies as well as operating practices, policies, procedures, and systems information
 - ■Intellectual Property

Where we sit today (continued):

- We all have significant assets at risk. In Financial Services, we Initiate and manage Trillions of Dollars in Electronic Financial Transactions in the United States Daily.
- We all have "exploitable data" exposed on our internal systems as well as on the Internet
- We have all experienced significant cyber incidents, many of which have cost us millions of dollars, loss of client trust, and landed us in the media.....in some cases in front of Congress
- The Barbarians are not only at the gate they are in our dining room, eating off our best china!"
- Cyber Protection Posture? Nobody has it right, yet! Not the Government – Not the Private Sector
- We are all, in some form, government regulated

Our Common Challenges:

- Key Threats to our Viability include Disruption of Service and Damage, Theft or Exploitation of our assets, information or resources
- We have all made very large investments in our IT infrastructure, systems and security but are yet, still significantly "underinvested" based on current and emerging threats
- We are still often times in a state of denial in the Executive Suite
- We are resourced constrained in the IT and Information Security areas by both funding & SME. There is exceptional competition for resources within our businesses aggravated by aggressive expense reduction initiatives to survive the economic downturn.

Our Common Challenges (Continued):

- We are chasing cybercrime based on our "investment model" of "too little, too late!
- Remediation and Upgrading are most often very slow, staged and cumbersome processes
- Long solution identification, vetting, selection, approval, funding and procurement process
- The System Development Lifecycle is a two edged sword it is vital to successful system implementation and change management but is hurting us in terms of rapid deployment of system countermeasures against the threat
- The "life-time" of successful countermeasures is limited often by deployment, the bad guys have already defeated it
- Often "drowning in information but starved for knowledge"

Fraud Trends / Privacy at Risk – Information Under Attack

Should The Threat & Reality of Compromised Consumer and Business Information housed by the Financial Services Sector as an "Intelligence Commodity" be of concern? Consider the information:

- Economic Impact US = Loss, Opportunity Cost, Imposed Limitations
 THEM (The Bad Guys) = source of funding & information
- Financial source, distribution, & destination of funds
- Detailed Spending Activities & Patterns (Personal & commercial behaviors)
- Geographic Movement of Principals
- Time & Place of Transactions
- Photographic Retrieval of transactions
- Predictive Analysis of Individual and Company Patterns
- Exploitation of individuals & companies based on internal knowledge
- Classic recruitment utilization
- Compromise of operations
- Utilization of informational access for new methods & tradecraft

Bank & Financial Fraud will continue to increase driven by:

- Expansion of Access Opportunities, New Technology, and Speed - New Products and Product Functionalities
- Expansion of criminal elements
 - Organized Crime
 - Street Gangs
 - Local, Regional, National & International Fraud Rings
 - Underground International Hacker Community & Marketplace
 - Terrorist Financing Opportunity
 - Intelligence Exploitation Opportunity
 - Active Placement and/or Recruitment of insiders with access to customer information
- Limited risk of immediate detection, apprehension, & prosecution

Bank & Financial Fraud will continue to increase driven by:

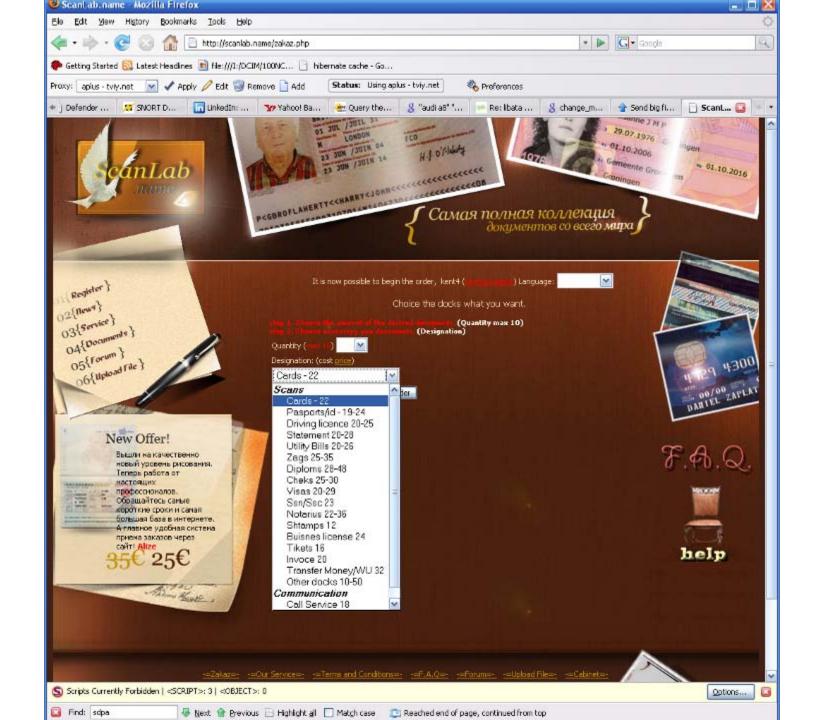
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 - Underground International Hacker Community & Marketplace
 - ■Terrorist Financing Opportunity
 - Intelligence Exploitation Opportunity
 - Active Placement and/or Recruitment of insiders with access to customer information
- Limited risk of immediate detection, apprehension, & prosecution

- Traditional Bank Customer Verification Tools Are Being Compromised:
 - Technology is in the hands of the criminals:
 - Counterfeiting of checks, personal identification, account access devices, signature verification, business documentation and reference letters is a major exposure area. This has carried over to the electronic environment
 - PC document scanning/laser printing, color copiers
 - PC Check Printing Packages with MICR Ink
 - Plastic Card Embosser / Mag Stripe duplicator
 - User IDs, Passwords, & Tokens vs. Malicious software & Hacker Tools

Examples of Fraudulent Ids

One person...multiple identities





Counterfeit Checks



VERIZON
NEW YORK INC.
NEW YORK INC.
NEW YORK NY 10008

PAY TO THE ANGEL MCCLOUD
ORDER OF
Nine Hundred Ninety-Four and 58/100

MEMO

Counterfeit USPS Money Orders

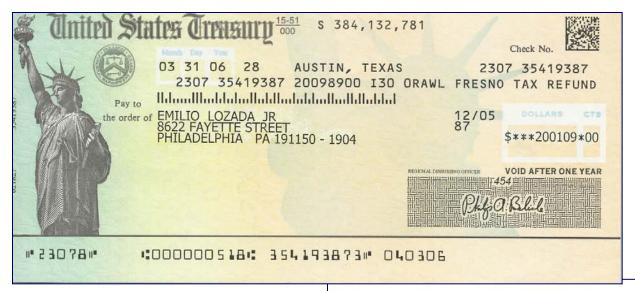
UNITED STATES POSTAL M	IONEY ORDER 15-800 000
O7495122112 2005-03-18 914060 1180000000000000000000000000000000	
M"DANIELLE HUGHES	NEGOTIABLE ONLY IN THE U.S. AND POSSESSIONS SEE REVERSE WARNING
ADDRESS 2100 ARBOR DRIVE, APT	FROM CHUCK GEOUGE 0005RK
-2310, DULUTH, CA, 30096	ADDRESS 1219 & COUTER ST APT 11
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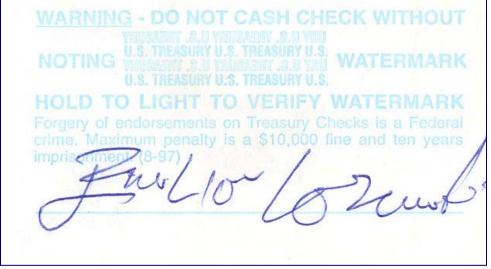




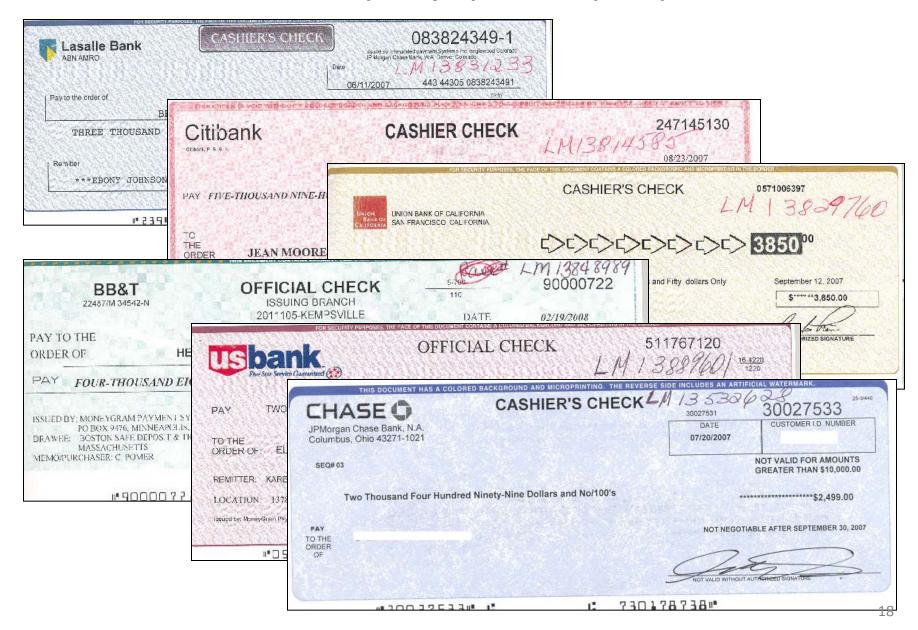


Bogus US Treasury Check





Misery Enjoys Company



- Traditional Bank Fraud Not Going Away Issues are complicated and compounded by additive cyber-risks
 - High Volume Compromises
 - •24X7 Automated Scripted Attacks
 - "Over-run the Compound" Resources
 - Cross Channel Infiltration
 - •Identification of Point of Compromise (POC) is complex and adds to investigative overhead

• New Technology – New Opportunities

- PC Banking & Expanded Functionality "Bank in a Box"
 - High Risk Functionality Inter-bank Money Movement, Wire Transfers and Bill Pay
 - Customer self-service –Product Sign-up & account maintenance like change of address and telephone number, check & card orders, change credentials
- The Internet "Reach out and touch someone" get touched right back!
- Peer to Peer File Sharing (PTP & BTB) Exploits
- Electronification ACH conversation & presentation of checks and return deposits.
 - Check R&T + Account Number = electronified check, ACH or Draft
 - Opportunity for Merchant and Merchant employee collusion
- Remote Deposit Collection (RDC)
- eCommerce a world of new payment mechanisms
- 3rd Party Aggregators "Partying With Third Parties" InfoSec Risk
- Wireless PCs, Palms, Text, and Cells

More Access Channels – Many No Longer Under Direct Bank Control

- ATMs Proprietary, Networked, Privately Owned
- POS Expansion
- Telephone Banking & Bank By Mail
- Internet / PC Banking, Blackberry, Palm et al Access
- ACH now allows direct access to customer accounts by merchants – both bank customer merchants and non-customer merchants via their respective bank (ala ODFI and RDFI)
- 3rd Party Aggregation & Merchant Processors

Remote Identification of Customers – A Continuing Challenge

- Bank By Mail
- Telephone Banking
- PC / Home Banking
- Availability of correct bio/demo information
- Availability and customer acceptance of unique remote identification information and options





CardTool™ Magnetic Card Reader for Visor™ Handheld Computer

Features

- · Versatile 3-Track Card Reader
- · 2 Mbytes of Flash Memory
- · Springboard Compatible
- · Low Power Design
- . Low Profile Case
- · No external batteries required
- · No Serial or IR port required
- . Compatible with Palm OS® Development tools
- · Durable and reliable
- · Optional custom magnetic Decoding Algorithms and Security Management features

Applications

- University ID Cards
- Driver's License
- Corporate Badges
- Trade Shows
- · Event Ticketing
- Patient Management
- · Membership Cards
- Customer Loyalty Applications
- Limited only by your imagination...



CardTool Reader Module-shown alone and installed

THE PERFECT TOOL FOR MAGNETIC CARDS

The CardTool reader is a Springboard expansion module that contains a 3 track magnetic card reader and 2 Mbytes of internal flash memory. The 3 track reader can read all standard encoded magnetic cards and can be field updated to read proprietary encoded cards. The 2 Mbytes of flash memory provides a convenient way to distribute card applications and back-up important data such as card transaction databases.

The plugn-play architecture of the Visor handheld facilitates the automatically installation of applications. Applica-



tion icons automatically install when the CardTool reader module is inserted. Eliminates timely application downloads and makes software distribution a snap! Simply insert the CardTool reader module and start reading cards!

The Springboard expansion slot provides the data communication paths and power. No external batteries are required plus the USB and IR ports remain available. No need to remove the CardTool reader to download transaction data!

The CardTool reader module ships with a sample card application (CardDemo) installed. It provides a convenient demonstration application and the C source code is included in the System Development Kit. If you've been looking for a low cost, handheld magnetic card transaction processing platform, look no further. Start developing your application today!



TokenWorks Inc. 3511 Silverside Rd., Suite 105 Wilmington, DE 19810

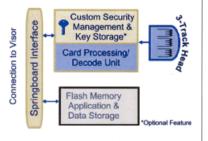
Email: info@tokenworks.com



CardTool Reader Pays for Itself

The CardTool will actually pay for itself by saving the time and hassle of loading card applications. Unlike 'clip-on' serial port readers, the Card-Tool reader module takes advantage of the Springboard expansion slot's plug and play architecture. The built in flash memory allows CardTool applications to be archived in non-volatile memory and activated when inserted into the handheld computer. The flash memory can also back-up critical transaction data. In the event the Handheld computer is disabled. just insert the CardTool reader into another handheld and resume where you left off. Not only do you save installation time, but all the time and effort that went into creating critical card transaction data. What is the cost of losing a day's worth of transactions?





CardTool Reader Block Diagram

System Development Kit

The CardTool System Development Kit has been designed by TokenWorks to get developers developing quickly. The less time spent searching for needed information and support, the quicker your product gets to your customer. The SDK contains; One CardTool reader Module, Sample encoded magnetic striped cards, shared library, sample application with source code, user and quick start documentation, programmers reference documentation, and email technical support. The SDK supports the GNU and CodeWarrior compilers. Check the TokenWorks web site for pending support for other development environments

CardTool Reader Module Specifications

- Weight-2.5 ounces / 71 grams
- 3.3"x3.0"x1.1"/ 84mmx77mmx27mm (LxWxH)
- 2 Mbytes of Flash memory-Field Updateable for software applications and card transaction database files
- Field Updateable magnetic card decode algorithms and proprietary functions
- Applications can run entirely in flash memory without taking away Visor computer memory
- Bi-directional card swiping
- Cards thickness from 0.76 mm± 0.08 mm thick

Durability

- MTBF: The reader chassis electronics have a minimum mean time before failure in excess of
- The read head chassis are designed for at least 500,000 swipes.

The following specifications apply for bit densities of

- 75 or 210 BPI on ISO 7811 compliant media: Media Speed: The readers read at speeds from
- 10 to 180 cm/second (4 to 71 IPS). Media Specifications: 300 - 4000 Oersted.

- Operational Temperature = -20° to +50° C
- = -30° to +70° C
- Read data densities of 60 to 265 BPI

Environmental

- Storage Temperature
- Humidity (non condensing) = 90% to 40°C

- Shut Down current
- Card Processing standby
- Card Processing active < 15mA
- Flash Write/Erase current < 20mA
- Flash Read current

Visor Handheld Specifications

Presently there are six Visor Handheld models; the Visor Deluxe, Visor Neo, Visor Platinum, Visor Pro, Visor Edge, and the Visor Prism. Visit www. handspring.com for complete product information.

- RAM: 2 MB, 8 MB or 16 MB depending on
- Springboard expansion slot for CardTool reader module or other Springboard modules
- Infrared transceiver to beam records and software to other Handspring or Palm devices Palm OS version 3.1 or 3.5.2 depending or
- Easy to use large touch screen display (160 x 160 pixels) with backlight. Prism has 65,000
- Power 2 AAA alkaline batteries or Internal rechargeable lithium ion battery. Rechargeable NiMH can replace alkaline AAA batter



Preliminary Product Information. Subject to Change Without Notice.

Date: November 2001 P/N: BR-120101-CWC-R1

CardTool and TokenWorks are trademarks of TokenWorks Inc. Visor, Handspring and Springboard are trademarks of Handspring Inc. All other brands, product names, and logos are trademarks of their respective owners

Skimming Device



- Restaurant employee caught using skimming device to capture ATM and Credit Card numbers in Drive-Thru window.
- Employee was paid \$1000 for 50 numbers and \$2000 for 100 numbers provided to recruiter.
- Recruiter was paid \$4000 for every restaurant employee he recruited by ring leader.



Issue 04.03

Embedded Parasites discovered inside POS Terminals

Fair Isaac's CardAlert Fraud Manager Team has received permission from the US Secret Service to distribute information pertaining to a recent investigation that revealed embedded card skimming equipment inside gas station POS terminals in Southern California. It is suspected that individuals are approaching gas station attendants in the Los Angeles area with offers of cash in exchange for their cooperation. Sources close to the investigation indicate that once cooperation is gained the criminals then replace the normal POS terminals with specially engineered ones that have skimming units embedded inside them.

The US Secret Service has confiscated several terminals that have uniquely engineered interior components designed to capture card and PIN information. It is believed that the criminals involved in this operation modify the interior workings of the POS terminals with simple handheld PDA devices that are perfect for continuous recording of card and PIN data. Once in place, the POS terminals do not require attention until the criminals return to reclaim their POS equipment. Fresh terminals then replace terminals already full of stolen data which will later be downloaded and used to produce counterfeit debit cards. The US Secret Service has stated that additional POS parasites may exist.

Please contact the Los Angeles field office fraud squad of the US Secret Service at (213) 533-4525 if you have any information that may lead to the detection of additional terminals.

The following is an actual photograph of the interior of one of the confiscated POS devices:



Small organizer fits neatly inside of POS terminal, skimmer and battery pack behind organizer

CONFIDENTIAL

A higher resolution of this image is located within the "What's Happening with CardAlert Fraud Manager" section of our website at: http://fraudforum.fairisaac.com/cgi-bin/yabb/YaBB.pl

888,440,4227 from the US

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703.486.1122 from anywhere www.fairisaac.com web investigations@fairisaac.com email



Recent example of card skimmer attached to the front of an ATM with the added twist of a camera!



As the skimmer is removed, you notice that part of an existing label on the ATM was partially obscured (see the previous slide).



When the brochure pocket is removed, the hole cut for the camera is clearly visible.

Example of Skimmer Recently Discovered an ATM in FL.





Skimmer and Keyboard Overlay Components



• The keypad fits neatly over the existing keypad and would also be very hard to detect. When the customers enter the PIN on the fake keypad, the keypad is wired to record the PIN.

New Frontiers Convergence – Some Volatile Combinations

- New Technology
- •Global Reach without benefit of parity of law or law enforcement
- Lack of Experience Lack of Experts
- New Legal Issues, new laws, no laws, lack of litigation findings
- A Handful of Electrons Investigate and Prosecute this!!!
- •Image No Originals Manipulation Beyond a Reasonable Doubt

Outsourcing, Off-shoring, and Utilization of Temporary Employees

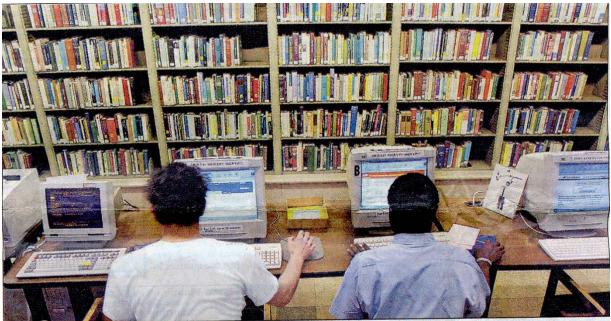
- —"Who is Minding Our Stores?"
- Administrative, Security & Janitorial, Production Shops, Mail Rooms, Copy Centers, Archival & Destruction
- •PC, Server, and LAN Support; Business Continuity Hot & Warm sites
- Off-shore of Application Development & Maintenance (ADM); Business Process Offshoring (BPO); and Knowledge Process Off-shoring (KPO)

CyberThreat Landscape

Technologies Facilitate Criminal Activity

Internet Fraud Considerations

- •Prevalent Internet Schemes:
- Phishing Pharming, Smishing, Vishing
- •SPAM Fraudulent Notification or Requests for Information
- BOTS & BOTNETS
- •Malicious Software Spyware, Virus Infection, Key Stroke Capture, Turn off protections, create cache, backdoors & high value transaction alerting. Zero Day Attacks
- •Web Site Impersonations (Spoofing) & Redirection Collection of Account & Authentication Information
- Man in the Middle & Session Hijacking
- •Breach of Credit Card Processors & Merchant Sites for theft of customer and account information followed by fraudulent transactions & card counterfeiting
- Exploitation of Peer File Share Functions PTP; BTB; BTP
- •Identity Theft/Customer Impersonation Establishment of New Account & Remote Authentication Challenges
- Packet Sniffing customer, employment, transmission site or bank
- •Use of Remote Access PC Programs (PC Anywhere Timbuktu)
- Denial of Service Attacks
- Web Vandalism



DAN LOH - ASSOCIATED PRESS PHOTO

Internet users work at computers at the Philadelphia Public Library. Using public terminals carries some risk.

Kinko's spy case illustrates risks of public Internet use

Man used software to steal computer users' names, passwords

> BY ANICK JESDANUN Associated Press

NEW YORK — For more than a year, unbeknownst to people who used Internet terminals at Kinko's stores in New York, Juju Jiang was recording what they typed, paying particular attention to their passwords.

Jiang had secretly installed, in at least 14 Kinko's stores, software that logs individual keystrokes. He captured more than 450 user names and passwords, using them to access and even open bank accounts.

The case, which led to a guilty plea earlier this month after Jiang was caught, highlights the risks and dangers of using public Internet terminals at cybercafes, libraries, airports and other establishments.

"Use common sense when using any public terminal,"

warned Neel Mehta, research engineer at Internet Security Systems Inc. "For most day-today stuff like surfing the Web, you're probably all right, but for anything sensitive you should think twice."

Jiang was caught when, according to court records, he used one of the stolen passwords to access a computer with GoToMyPC software, which lets individuals remotely access their own computers from elsewhere.

The GoToMyPC subscriber was home at the time and sud-

denly saw the cursor on his computer move around the screen and files open as if by themselves. He then saw an account being opened in his name at an online payment transfer service.

Jiang, who is awaiting sentencing, admitted installing Invisible KeyLogger Stealth software at Kinko's as early as Feb. 14, 2001. The software is one of several keystroke loggers available for businesses and parents to monitor their employees and children.

SEE KINKO'S | 6D

Russian Business Network

- Network traces taken outside of Banks show encrypted data being "posted" to RBN collection points.
- Network traces show malware being downloaded onto Bank data equipment.
- Undetected malware from Bank machines that was traced to RBN collection servers.
- Many compromised internal and remote access machines were participating in the Storm Worm botnet, which is tied to the RBN.
- Some computers of home users and customers appear on malicious activity blacklists. These users may be unaware that they are housing – or involved with – the malicious activity.

----Original Message----

From: FDIC [mailto:Waverly_Nikki@gte.net]
Sent: Monday, January 26, 2004 11:10 AM

To: quinn@borq.com

Subject: Important News About Your Bank Account

To whom it may concern;

Email used in recent "phish" that sent responders to a fake FDIC website.

In cooperation with the Department Of Homeland Security, Federal, State and Local Governments your account has been denied insurance from the Federal Deposit Insurance Corporation due to suspected violations of the Patriot Act. While we have only a limited amount of evidence gathered on your account at this time it is enough to suspect that currency violations may have occurred in your account and due to this activity we have withdrawn Federal Deposit Insurance on your account until we verify that your account has not been used in a violation of the Patriot Act.

As a result Department Of Homeland Security Director Tom Ridge has advised the Federal Deposit Insurance Corporation to suspend all deposit insurance on your account until such time as we can verify your identity and your account information.

Please verify through our IDVerify below. This information will be = checked against a federal government database for identity verification. This only takes up to a minute and when we have verified your identity you will be notified of said verification and all suspensions of insurance on your account will be lifted. http://www.fdic.gov=01@211.191.98.216:3180/index.htm

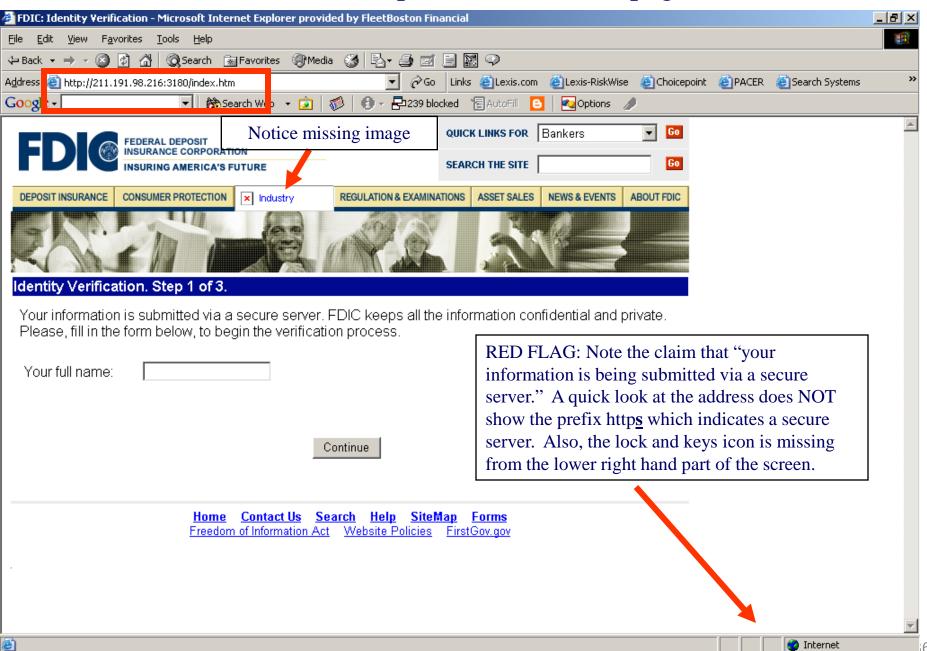
Failure to use IDVerify below will cause all insurance for your account to be terminated and all records of your account history will be sent to the Federal Bureau of Investigation in Washington D.C. for analysis and verification. Failure to provide proper identity may also result in a visit from Local, State or Federal Government or Homeland Security Officials.

Thank you for your time and consideration in this matter.

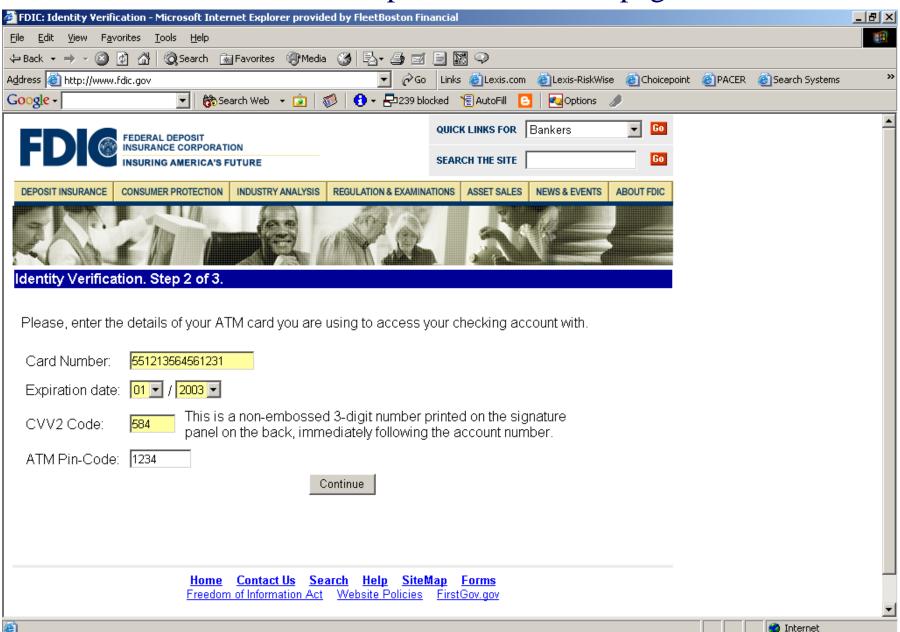
Donald E. Powell
Chairman Emeritus FDIC
John D. Hawke, Jr.
Comptroller of the Currency
Michael E. Bartell
Chief Information Officer

Address appears to be legitimate but after the http://www.fdic.gov the address that follows routes users to a server located at 211.191.98.216

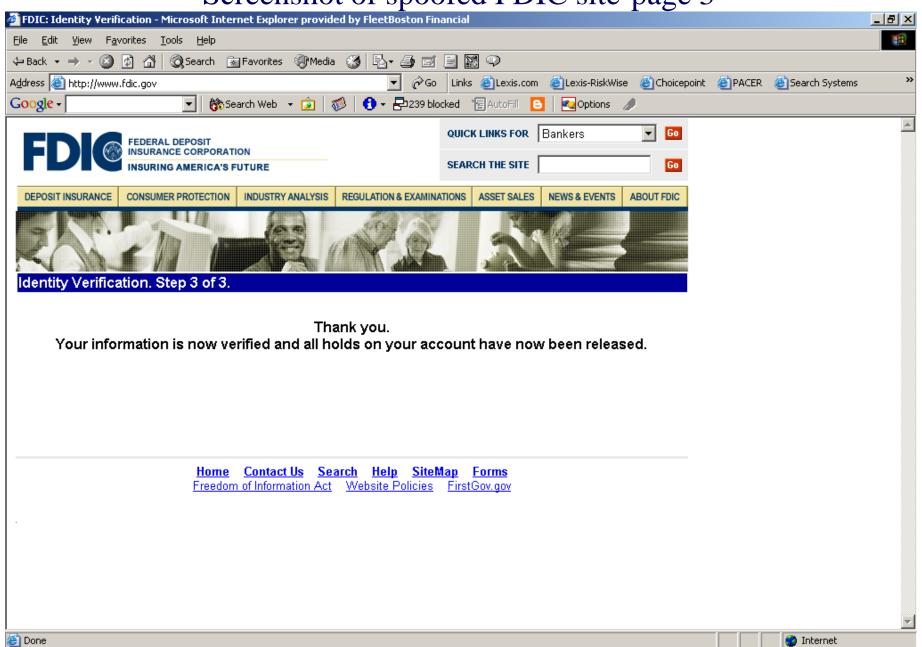
Screenshot of spoofed FDIC site-page 1



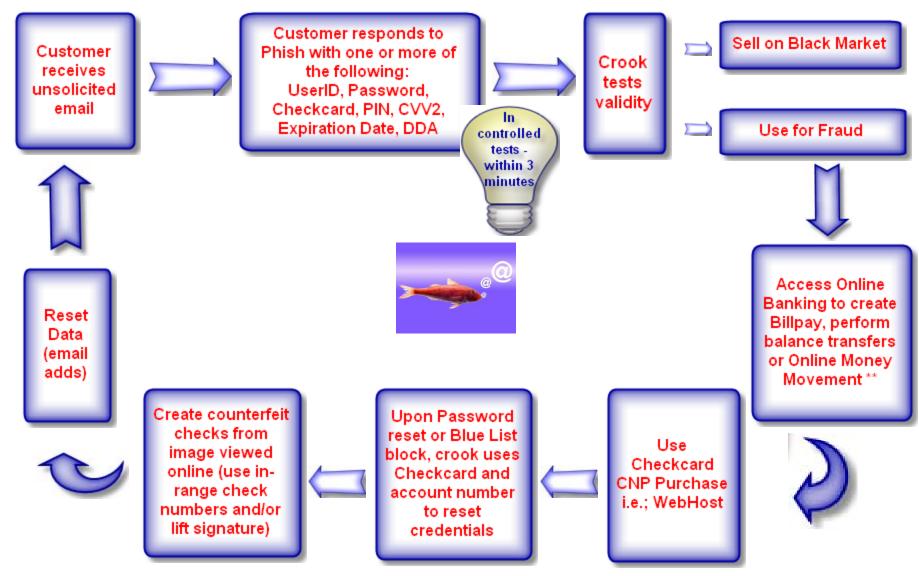
Screenshot of spoofed FDIC site-page 2



Screenshot of spoofed FDIC site-page 3



Impact of a Phish



Phish Progression – The Bait

----- Forwarded message ------

From: Wachovia < service@wachovia.com >

Date: Jan 6, 2007 9:16 PM

Subject: Wachovia Online Banking Notice

To:

Dear Wachovia Bank Customer,

It has come to our attention that your account needs to be updated due to the recent changes we have made to our Online Banking system. This update will allow us to activate new features for your account on our new system. We have made these changes to serve you better.

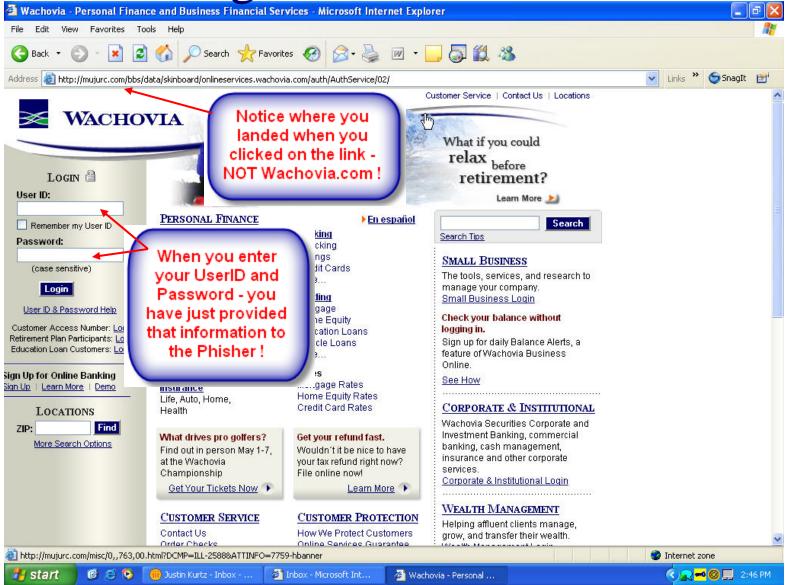
With our 24 hour online financial center, you can manage your Wachovia accounts, see images of the front and back of cleared checks and deposit tickets, transfer funds between eligible Wachovia Bank accounts, order checks and much more.

Wachovia Online Banking is quick, easy and convenient allowing you to bank whenever and wherever you want. Please click the link below, this will take you to Wachovia Online Banking to complete your update.

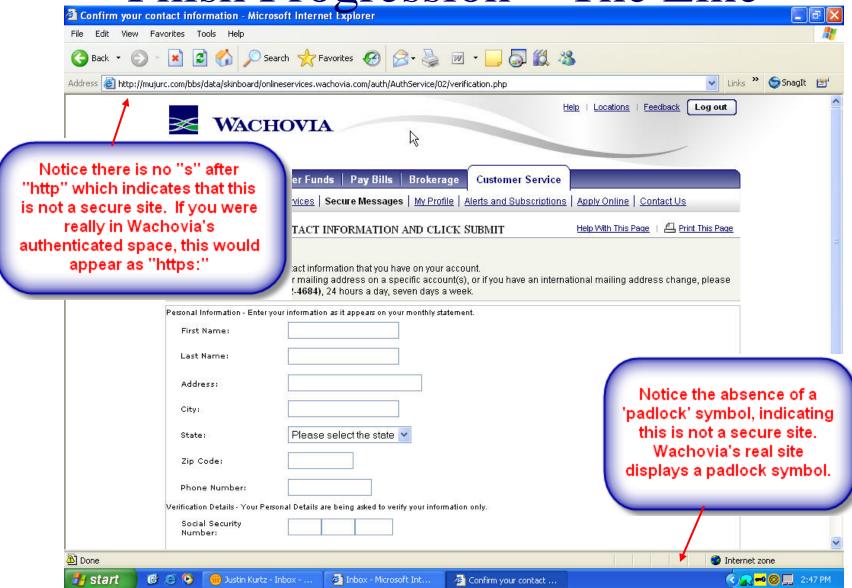
It's important that you activate your card, otherwise you will not be able to access our new Online Banking system and features.

https://www.wachovia.com/auth/AuthService

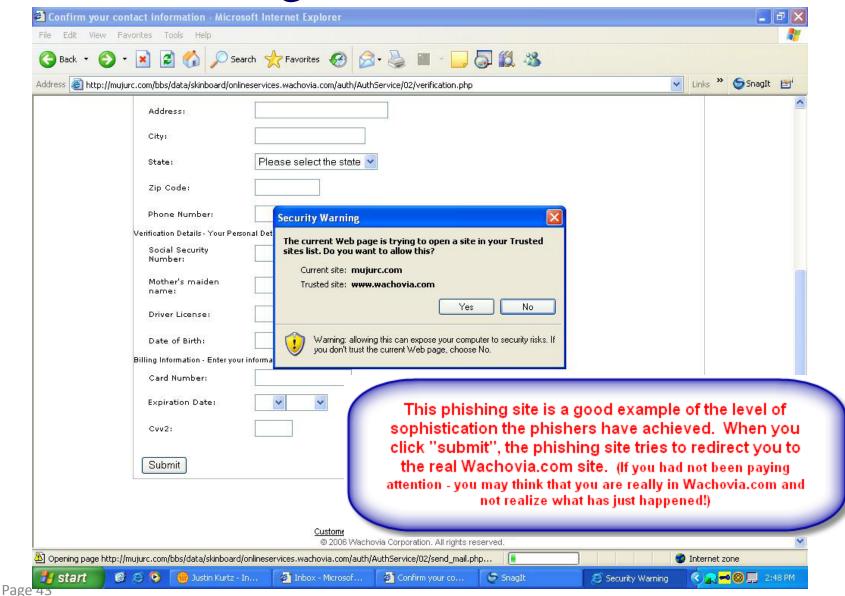
Sincerely, Wachovia Bank Security Department. Phish Progression – The Hook



Phish Progression – The Line



Phish Progression – The Sinker





Internet threat: Hackers swarm bank accounts

By Byron Acohido, USA TODAY

New and nasty banking trojans are on the rise on the Internet and attacking online bank accounts.

The new trojan programs — which wait on your hard drive for an opportunity to crack your online banking account — are different from traditional "phishing" e-mail scams that try to trick you into typing your login information at fake bank websites.

They're invisible, can steal data multiple ways and require no action by the victim to be launched.

"Phishing doesn't work as well as it used to," says Patrik Runald, security specialist at F-Secure, the Internet security firm. "Banking trojans provide a very effective and direct means for the bad guys to get their hands on the money."



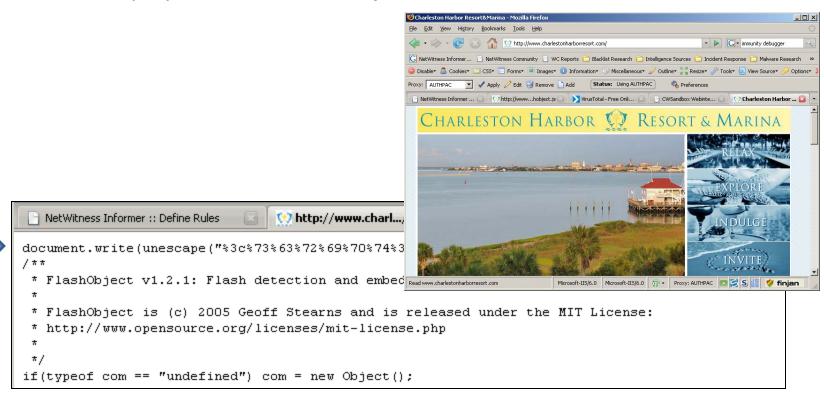
Heartland Breach: Bigger than TJX?

Experts Debate How it Happened and What Damage Could be Done
Linda McGlasson, Managing Editor
January 26, 2009

Exactly how big was the Heartland data breach? This is the great unanswered question since last week, when Heartland Payment Systems (HPY), a Princeton, NJ-based credit card processor, revealed that <u>its</u> computer systems had been breached, and an unknown number of credit card account numbers were exposed to hackers. Since then, at least eight financial institutions have stepped forward to say their customers had cards affected by the breach, and one security expert says, in theory, that Heartland could be bigger than the <u>TJX breach</u> that dominated the news and set the data breach benchmark in 2007.

Example – Malware Delivery

http://charlestonharbourresort.com – Legitimate javascript applet used to detect flash player and has been injected with obfuscated malicious code

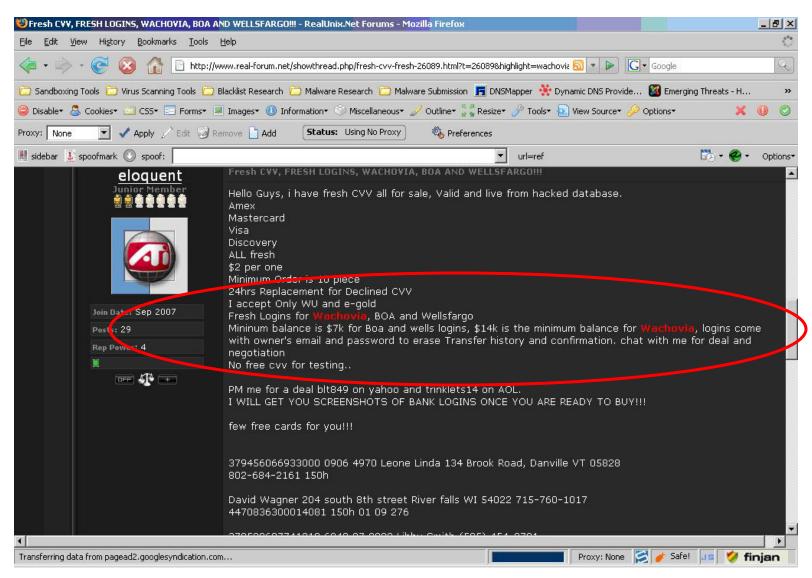


A program installs malicious service then deletes itself.

This behavior hides the malware

Even if the initial download is detected, the local service will not be seen via the network.

Bank Information For Sale



Wachovia accounts for sale with a minimum balance of \$14,000.

...where credentials can be purchased

2800 customers identified from one source in the last few months, sourced from Russian business network

Actual records of malware compromises of the Bank's customers

			*				
93.90.242. unknown	80.194.238 telewest.n.uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	###### 2008	3-05-082008-05-08T20:59:30.0Z
93.90.242. unknown	82.5.116.2 ntl.com uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-08 2008-05-08T20:54:00.0Z
93.90.242. unknown	82.39.130. telewest.niuk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-08 2008-05-08T20:52:20.0Z
93.90.242. unknown	86.12.247. ntl.com uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-08 2008-05-08T20:57:58.0Z
93.90.242. unknown	86.137.60. bt.net uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-08 2008-05-08T20:50:00.0Z
93.90.242. unknown	86.141.65. bt.net uk	lloydstsb.cuk	lloydstsb.c 193.34.231	443	1 Financial II	####### 2008	3-05-112008-05-11T18:55:29.0Z
93.90.242. unknown	213.107.82 ntl.com uk	NoRoute_PrivateIP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T12:39:06.0Z
93.90.242. unknown	69.125.45. cv.net us	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T14:41:17.0Z
93.90.242. unknown	77.28.131. mt.net.mk mk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T17:10:16.0Z
93.90.242. unknown	80.42.61.2 uk.tiscali.c uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T16:49:14.0Z
93.90.242. unknown	81.105.232 ntl.com uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-12T07:05:34.0Z
93.90.242. unknown	81.129.170 bt.net uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T19:11:41.0Z
93.90.242. unknown	82.17.234. ntl.com uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T17:53:14.0Z
93.90.242. unknown	82.39.130. telewest.niuk	NoRoute PrivatelP	online-lloy(0.0.0.0	443	0 None	####### 2008	3-05-112008-05-11T18:10:30.0Z
93.90.242. unknown	82.47.82.1 telewest.n/uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T17:03:15.0Z
93.90.242. unknown	86.26.51.1 ntl.com uk	NoRoute PrivatelP	lloydstsb.c0.0.0.0	443	1 Financial II	####### 2008	3-05-112008-05-11T17:05:25.0Z
93.90.242. unknown	86.31.97.2 ntl.com uk	NoRoute_Pr Decryp	ntData		Bin	bank nam	e CheckDateTimeUTC
93.90.242. unknown	86.137.60. bt.net uk	NoRoute Pri492181		3		Lloyds TS	

NoRoute_Pr 4921819327444882=1102

NoRoute_Pr 4921829383605250=0904

Bank's credit and debit card numbers Being checked for status and available balances in preparation for fraud Source "just buy it" CChecker - Haxtor network

93.90.242. unknown 86.141.65. bt.net

93.90.242. unknown 86.160.172 bt.net

93.90.242. unknown 90.206.128 easynet.negb

93.90.242. unknown 92.236.137 telewest.n/uk

93.90.242. unknown | 82.71.7.16 zen.co.uk uk

93.90.242 unknown 82.71.7.16 zen.co.uk uk

93.90.242. unknown 82.71.7.16 zen.co.uk uk

93.90.242. unknown | 82.71.7.16 zen.co.uk | uk

	102102000000200	102102	Liojao_rob_bar	001.1212000	
NoRoute_Pr	4921819285389921=0907	492181	Lloyds_TSB_Bar	04/12/2008	112
NoRoute_Pr	4921819615060457=1103	492181	Lloyds_TSB_Bar	04/12/2008	112
lloydstsb.cu	4921816470016046=1102	492181	Lloyds_TSB_Bar	04/12/2008	112
lloydstsb.cu	5404635200012858=0812	540463	LLOYDS_TSB_B	07/12/2008	196
lloydstsb.cu	5404631321045984=0901	540463	LLOYDS TSB B	08/12/2008	272
omniture.c u	4921818323654031=0811	492181	Lloγds TSB Bar	29/11/2008	272
	4462747032153719=1109	446274	Lloyds_TSB_Bar	01/12/2008	299
	4462747032153719=1109	446274	Lloγds TSB Bar	01/12/2008	299
	4921818164439419=1105	492181	Lloyds_TSB_Bar	02/12/2008	527
	4921817430886437=1110	492181	Lloyds TSB Bar	02/12/2008	527
	4921818551325833=1103	492181	Lloγds TSB Bar	03/12/2008	527
_	4921817826917614=1105	492181	Lloyds_TSB_Bar	03/12/2008	527
ncoc	4921817644034568=0904	492181	Lloyds TSB Bar	04/12/2008	577
	4921819504210130=1106	492181	Lloγds TSB Bar	06/12/2008	586
	4921826741114066=1106	492182	Lloyds_TSB_Bar	09/12/2008	619
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	4462619844723411=0905	446261	Lloγds TSB Bar	07/12/2008	677
work	5404635949079184=1002	540463	LLOYDS_TSB_B	01/12/2008	677
VVOIK	4670621419262096=0901	467062	Lloγds TSB Bar	01/12/2008	677
	4670621419262096=0901	467062	Lloyds_TSB_Bar	04/12/2008	677
	4462740937717829=0904	446274	Lloyds_TSB_Bar	02/12/2008	677

492181 Lloyds TSB Bar

492182 Lloyds TSB Bar

JbiUserID

112

112

04/12/2008

04/12/2008

09/12/2008

Wireless Vulnerabilities

- New Trojan Endangers Windows Mobile Devices This malware affects Windows Mobile PocketPC devices. The Trojan sends the infected device's serial number, operating system and other sensitive information to the Trojans' creators
- Security Hole Found in Apple's iPhone Hackers could take control of an iPhone if its owner visits a doctored web site or Internet hotspot.
- Car Whisper A Bluetooth mobile phone exploit called "car whisperer" allows hackers to take advantage of default Bluetooth passwords. The hackers sit at a stoplight and snoop information off of your phone.



Collaboration Strategies

Identity Theft Assistance Center

- Financial Services Roundtable ITAC 41+ Members
- Operational Success 50,000+Consumers helped
- Strategic Success Credibility and relationships with law makers, regulators, and law enforcement

Shared Industry Information

- Loss & Operational Metrics
- VISA IRKI and Mastercard Loss Information
- Early Warning Services
- Hot files
- Internal Fraud Prevention Program (EW/BITS)
- Shared Social Networks of Fraud
- BITS, ABA, Financial Services Technology Consortium

Cooperative Industry, Law Enforcement & Intelligence

- FS ISAC
- US Postal Inspection Service; US Secret Service; FBI
- IRS and various Federal Law Enforcement work groups

Private & Public Cooperation

*** Joint USSS/FBI Advisory ***

PREVENTIVE MEASURES

- Over the past year, there has been a considerable spike in cyber attacks against the financial services and the online retail industry. There are a number of actions a firm can take in order to prevent or thwart the specific attacks and techniques used by these intruders. The following steps can be taken to reduce the likelihood of a similar compromise while improving an organization's ability to detect and respond to similar incidents quickly and thoroughly.
- Attacker Methodology:
- In general, the attackers perform the following activities on the networks they compromise:
- They identify Web sites that are vulnerable to SQL injection. They appear to target MSSQL only.
- They use "xp_cmdshell", an extended procedure installed by default on MSSQL, to download their hacker tools to the compromised MSSQL server.
- They obtain valid Windows credentials by using fgdump or a similar tool.
- They install network "sniffers" to identify card data and systems involved in processing credit card transactions.
- They install backdoors that "beacon" periodically to their command and control servers, allowing surreptitious access to the compromised networks.
- They target databases, Hardware Security Modules (HSMs), and processing applications in an effort to obtain credit card data or brute-force ATM PINs.
- They use WinRAR to compress the information they pilfer from the compromised networks.
- We are providing the following preventive measures. Performing these steps may not prevent the intruders from gaining access, but they will severely impact their effectiveness based on current attack methods.
- Recommendation 1: Disable potentially harmful SQL stored procedure calls.

Collaboration & Containment Strategies

- Cooperative Industry Ventures & Intelligence Sharing Can be powerful BUT
 - Many individual initiatives often too little connectivity
 - Long start-up times usually from the beginning with limited trust, credibility, and confidence
 - Sharing of information of value is limited often one way
 - True value and impact is too often marginal in terms of tangible benefit
 - Lifetime is limited "often dies on the vine"

Mutual Authentication

- Customer to Institution
- Institution to Customer
- Institution to Institution
- Citizen to Government –
- Government to Citizen/Commerce

Collaboration & Containment Strategies

- Enlisting the Academics Computer Science
 - CERT (Carnegie-Mellon University)
 - University of Alabama
 - MIT
 - Many Others
- Other Opportunities Use The Data To Our Advantage
 - FINCEN Suspicious Activity Reports (SARS)
- "Mine the Data"for Identification & Prevention vs. just compliance & law enforcement – "There's Gold in dem, der hills!"
 - SSA Blind Verification of SSN to Name
 - IRS Blind Verification of Personal & Financial Info
 - TBD

Collaboration & Containment Strategies

Multi-Factor Authentication

- Digital Certificates
- Tokens One Time Passwords
- Challenge Questions "in Wallet" and "Out of Wallet."
- Biometric
- Device Fingerprinting
- Adaptive Authentication

Hot Listing

- IP Black Lists
- White Lists
- Shared Industry Hot files

Device Signature & Fingerprint

- 41st Parameter, RSA, Iovation
- Hardware & Software plug-ins

What is needed to be successful

- Recognize You Are Dealing With a Protection of Information Issue & likely the need to successfully operate in a "Dirty Environment" - likely at the root is the limitations & shortcomings of Customer Authentication
- Break the Silos intra-bank; inter-bank; inter-industry; intercommerce; commerce to government — embrace perspective, learnings, tools, and resources afforded by interdisciplinary approaches
- Time is of the Essence It's the 11th Hour you likely don't have the time to build it all by yourself from scratch
- Holistic End to End View of the Issues, Problems, & Solutions
- Proactive Investment & Discipline to get your transactional, non-financial, and external data accessible and usable

What is needed to be successful

- Envision & Build "Gauntlets of Protection"
 - Multiple Layers of Protection for product, process, & distribution channels and systems
 - Integration of Multiple Point Solutions
 - Integration of Case Management & Prevention Platforms
- Be Aggressive in identifying and attacking criminal behavior – know your enemy – know your friends!
 - Detection & Prevention Systems
 - Investigation and Recovery
 - What is the Point of Compromise (POC)? Internal or External who, what, how, when, and why?
 - What are the financial & information recovery options?
 - Who are the "other kids on the block"— Allies who are adversely affected?-Financial Services, Telecom, Energy, Payments, Merchants.

What is needed to be successful

- Cycle of Continuous Improvement
 - Closed Loop ID & Measure what is presented for review vs. what is caught and actioned
- Translate into the "language of business" Return on Investment; True Operational Cost Impacts; etc.

Western Hemisphere Travel Initiative



Getting You Home



Officer Testimonial





WHTI Implementation June 1, 2009

"The Western Hemisphere Travel Initiative reported its first 24 hours of operation at our land and sea ports of entry – now fully in operation across all ports of entry – as nothing short of incredible success. On June 1, 2009, WHTl became the first fully implemented 9/11 Commission border recommendation that was not "under construction" prior to our Final Report of July 2004."

- Janet Kephart, 9/11 Commission Member





WHTI Implementation June 1, 2009

- No negative impact to border operations
- Increase in enforcement intercepts
- High compliance rates
 - Day one 93% national compliance rate
 - First week 95.7% national compliance rate
 - Today 95.6% national compliance rate
 - 98.2% on Northern border
 - 93.1% on Southern border





Alternative Document Update



Over 23% of all documents being presented at land ports of entry are RFID-enabled

- Enhanced Driver's Licenses (EDLs) More than 380,000 issued (U.S. and Canada)
- Department of State:
 - Over 1.9 Million Passport Cards issued
 - Over 276,000 RFID-enabled Border Crossing Cards (BCCs) issued
- Trusted Traveler Programs
 - More than 651,000 individuals enrolled
- Enhanced Tribal Cards
- RFID-enabled Lawful Permanent Resident Cards to be issued





WHTI Communications

- Targeted outreach continues:
 - Media Relations
 - Working with EDL states
 - Targeting markets with higher noncompliance
 - Stakeholder outreach
 - GetYouHome.gov(KnowYourBorder.gov,VersLesUSA.gov)
 - 2010 Winter Olympics







Current and Future WHTI Operations

- Committed to working with travelers to obtain their WHTIcompliant travel documents
- Remain in informed compliance
- Continue to promote RFID document saturation
- Transition to Land Border Integration/Modernization Program Management Office whose strategies will include:
 - Pedestrian Re-engineering
 - Traffic Management
 - Further RFID Deployments at additional lanes and ports
 - National License Plate Reader (LPR) Program



Western Hemisphere Travel Initiative



Thank you





Federal Market Analysis * GSA Schedule Assistance

Business Development Mentoring * Training * Proposal Support

Our Five Winning Services

- **★ Federal Market Analysis**
- **★ GSA Schedule Assistance**
- **★ Proposal Development**
- **★ Business Development Mentoring**
- ★ Training



The GSA Multiple Award Schedule (MAS) Program



Schedules Overview

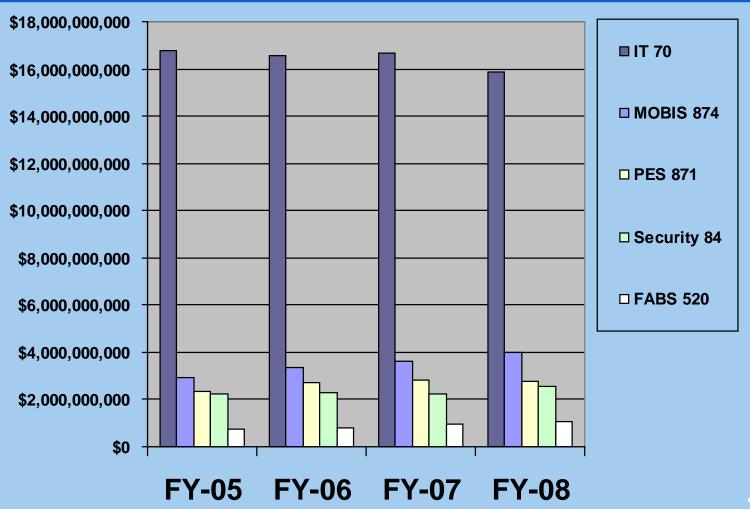
- ★Govt. Wide Acquisition Contract (GWAC) with optional Worldwide Scope
- ★Open Season Solicitations
- ★5 Year Period of Performance (Three 5 Year Renewals)*
- ★ No Maximum Order Limitations (Thresholds)
- ★ No FedBizOpps Posting Requirements



Schedules Overview

- ★3 Requests For Quotations (RFQs) then Best Value Award
- ★0.75% Industrial Funding Fee (IFF)
- ★Quarterly Reporting Only (GSA is not involved in orders)
- ★ State and Local Gov't Purchase from IT and Security
- ★ Recovery Act Purchasing

5 Contracts Account for 71% of Sales





GSA Schedule #84

- **★** Total Solutions for:
 - Fire Fighting and Rescue Equipment
 - Alarm/Facility Management Systems,
 Professional and Guard Services
 - Special Purpose Clothing
 - Law Enforcement and Security Equipment
 - Marine Craft and Equipment



GLOBAL SERVICES

YOUR TEAM FOR WINNING FEDERAL CONTRACTS

Federal Market Analysis | GSA Schedule Assistance
Business Development Mentoring | Training | Proposal Support

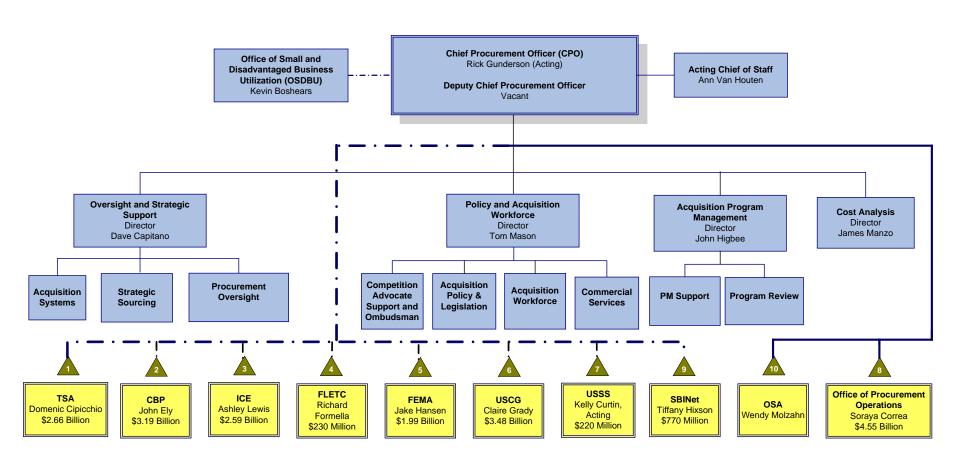


DHS Office of Procurement Operations

National Defense
Industrial Association
Homeland Security Symposium

Soraya Correa, Director September 10, 2009

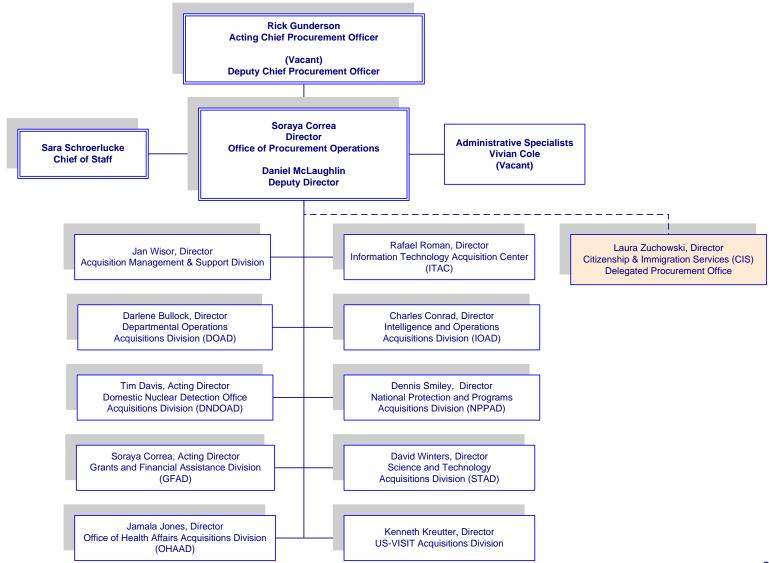
CPO Organization



As of 5/27/09

DHS Heads of Contracting Activities
FY 2008 Spends

OPO Organization





OPO Customers

- Executive Office of the Secretary
- Under Secretary for Management, including CFO, CIO, CPO, CAO, CHCO and CSO
- Under Secretary National Protection and Programs Directorate
- Under Secretary Science & Technology
- Under Secretary Intelligence and Analysis
- Director Domestic Nuclear Detections Office
- Assistant Secretary Office of Health Affairs
- Director Citizenship & Immigration Services
- Director Operations Coordination

- Assistant Secretary for Policy
- Assistant Secretary Legislative Affairs
- Assistant Secretary Public Affairs
- Director Counter Narcotics Enforcement
- Chief Privacy Officer
- Civil Rights & Civil Liberties Officer
- Director National Cyber Security Center
- General Counsel
- Citizenship & Immigration Service Ombudsman

OPO Mission and Values

Our Mission

We will obtain the best value products and services for our DHS customers. We will be innovative and continuously improve our processes for managing and implementing acquisitions. We will support the mission, ensuring conformance with law and preserving the public's trust.

Our Values

Teamwork

We communicate actively and openly with each other and with all whom we serve.

We value and respect the contributions of others.

Integrity

We take responsibility for our actions and keep our word.

Professionalism

We conduct ourselves in a professional, Courteous manner that reflects well on our agency.

Customer Service

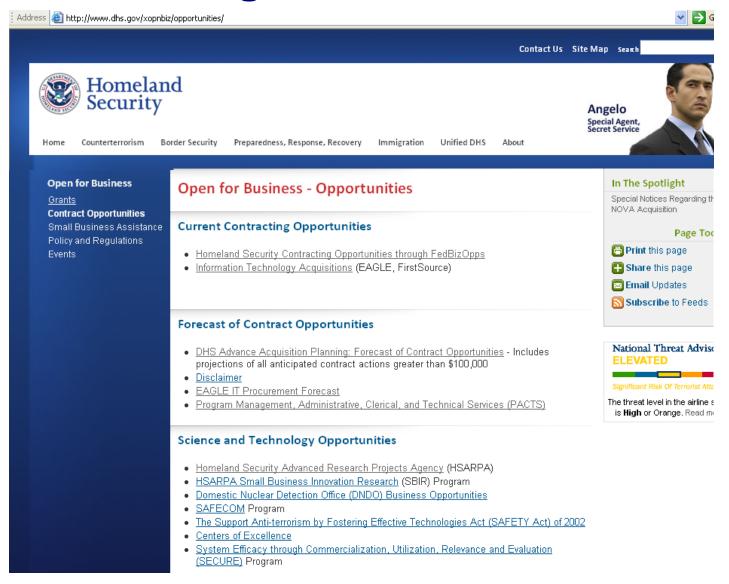
We are committed to helping customers achieve their mission. We work to serve our customers efficiently and exceed their expectations.

Excellence

We strive for excellence and are committed to continuous quality improvement. We take pride in providing the highest quality professional service.

"Committed to Excellence"

Doing Business with DHS





CTTSO Overview

NDIA 9 Sept 2009





Mission

Vision:

Identify requirements to combat terrorism and provide solutions to warfighters, first responders, and other front-line users as rapidly as possible.

Mission:

Identify and prioritize the needs of the interagency community charged with combating terrorism. Deliver capabilities to those on the front lines through rapid research, development, test, evaluation, and operational support. Incorporate available expertise and experience from government, commercial, private, and academic sources throughout the United States and the world.

Objectives:

- Provide interagency forum to coordinate R&D requirements for combating terrorism
- Sponsor interagency advanced technology development
- Promulgate technology & information transfer
- Influence policy development
- Guide basic and applied research



CTTSO Organization



Special Operations/Low-Intensity Conflict & Interdependent Capabilities



Department of State



Combating Terrorism Technical Support Office



Technical Support Working Group



Explosive Ordnance
Disposal/Low-Intensity Conflict



Irregular Warfare Support

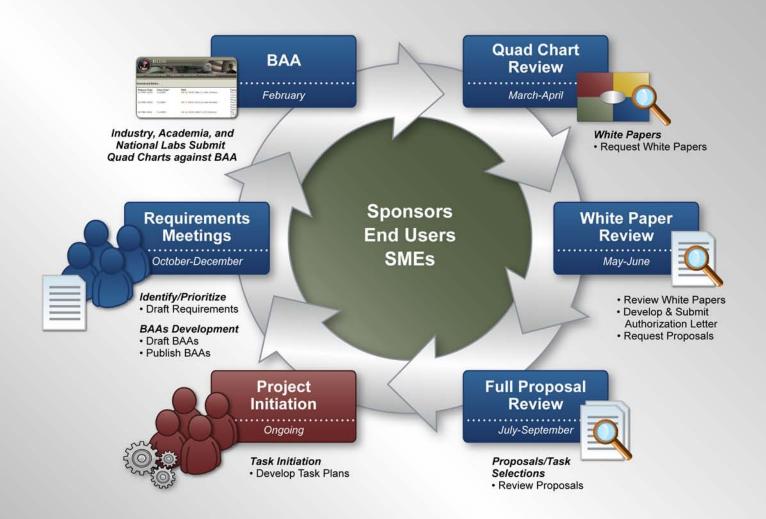


Human, Social, Cultural, & Behavior Modeling





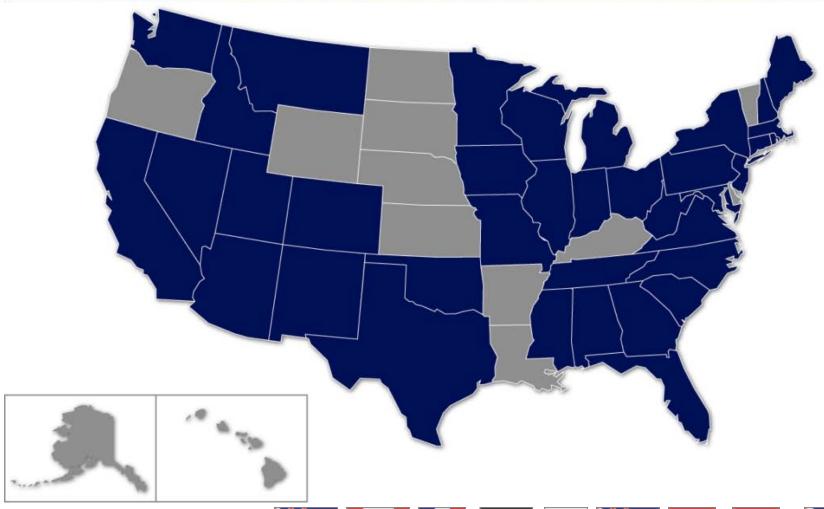
Business Cycle



UNCLASSIFIED



CTTSO Performers























France

Germany

el New Zealand

Singapore Switzerland



Interagency Partners

Department of Defense

OASD(SO/LIC)

OATSD(NCB)CP/CBD

OUSD(A&T) DDR&E and S&TS/LW

Armed Forces Institute of Pathology

Defense Advanced Research Projects Agency

Defense Computer Forensics Laboratory

Defense Intelligence Agency

Defense Threat Reduction Agency

Joint IED Defeat Task Force

National Security Agency

Pentagon Force Protection Agency

Polygraph Institute

The Joint Staff

Unified Commands

US Special Operations Command

US Air Force

Air Combat Command

Air Force Research Lab

Electronic Systems Center

AFOSI

US Army

52nd ORD

SBCCOM / ECBC

Corps of Engineers / ERDC / PMDC

Criminal Investigations Command

Natick RDE Center

22nd Chemical Battalion (Tech Escort)

Training and Doctrine Command

National Guard Bureau

US Navy

Naval Criminal Investigative Service

Naval Facilities Engineering Service Center

Naval Special Warfare

NEODTD / DTRG

US Marine Corps

Chemical Biological Incident Response Force Network Operations & Security Command

Department of State

Bureau of Diplomatic Security

Office of the Coordinator for Counterterrorism

Overseas Building Operations

Department of Agriculture

Agricultural Research Service

Animal and Plant Health Inspection Service

Food Safety and Inspection Service

Office of the Inspector General

Department of Energy

National Nuclear Security Administration

Office of Energy Assurance

Office of Security

<u>Department of Health and</u> Human Services/USPHS

Centers for Disease Control & Prevention

Food & Drug Administration

National Institute for Occupational Safety and Health

Department of Homeland Security

Border and Transportation Security
Immigration and Customs Enforcement

Office for Domestic Preparedness

UNCLASSIFIED

Emergency Preparedness &

Response

Transportation Security Agency

Science and Technology

US Coast Guard

US Secret Service

Department of Commerce

National Institute of Standards and Technology Office of Law Enforcement Standards

Department of Justice

Bureau of Alcohol, Tobacco, Firearms and

Explosives

Drug Enforcement Administration

Federal Bureau of Investigation

Federal Bureau of Prisons

National Institute of Justice

Office of Justice Programs

US Marshals Service

Department of Transportation

Federal Aviation Administration

Federal Railroad Administration

Federal Transit Administration

National Highway Traffic Safety Administration

Volpe National Transportation Systems Center

Department of the Treasury

Federal Reserve Board

Independent Agencies

Environmental Protection Agency

General Services Administration

Intelligence Community

Interagency Board

National Virtual Translation Center

Nuclear Regulatory Commission

State and Local Agencies

Supreme Court of the United States

US Capital Police

US Postal Inspection Service

US Senate Sergeant at Arms

US Supreme Court Police



New Directions

- EXPEDITIONARY / MOBILE OPERATIONS
 - Ruggedized Solutions
 - Austere Environment
- SMALL UNITS / PATROL BASES
 - Low Profile
 - Integrated Packages
- SPECIAL THREAT FOCUS
 - Tunnels / Underground Voids
 - Waterside Security
 - Homemade Explosives



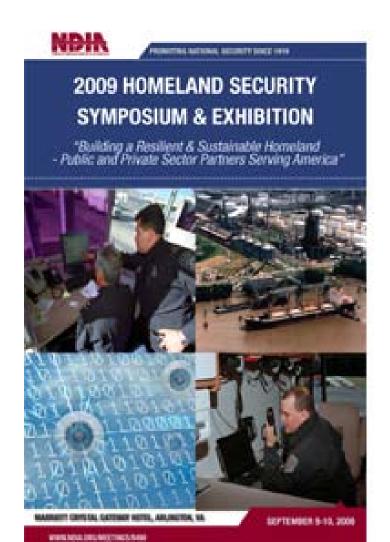
TSWG Mission

• Mission: Conduct the U.S. national interagency research and development program for Combating Terrorism through rapid research, development, and prototyping.

• Objectives:

- Provide interagency forum to coordinate R&D requirements for combating terrorism
- Sponsor R&D not addressed by individual agencies
- Promote information transfer

International Supply Chain Vulnerabilities



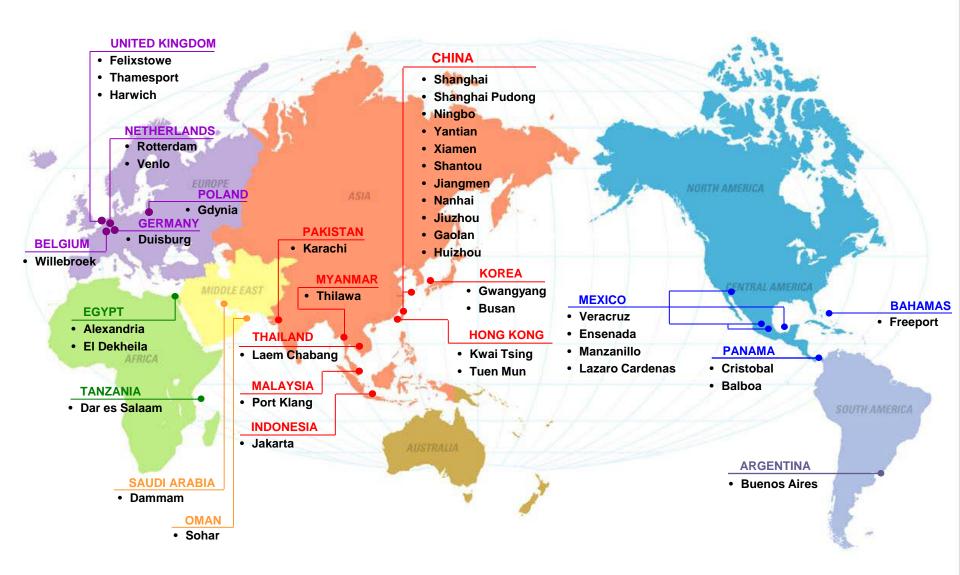
Gary D. Gilbert
Senior Vice President
Hutchison Port Holdings
9 September 2009

Maritime Perspective Protecting Ports, Vessels & Cargoes



野男

HPH Ports Around The World – 49 Ports



HPH 2008 Volume 69 million Containers

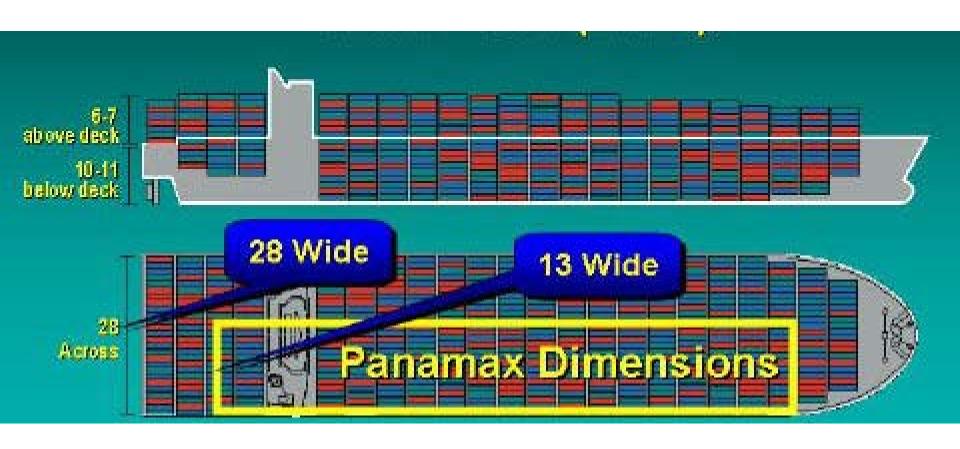


The 15,000 TEU Containership

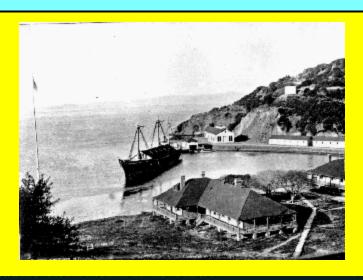
LOA. = 400 m (1,312 ft.)

Draft = $14 \, \text{m} \, (46 \, \text{ft.})$

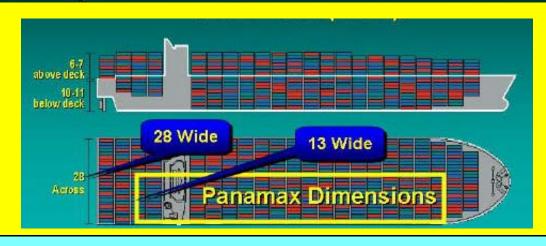
BEAM = 69 m (226 ft.)



Quarantine Station



The 15,000 TEU Containership





INTERNATIONAL MARITIME ORGANIZATION

Implementation of the IMO – ISPS Code



International Maritime Organization

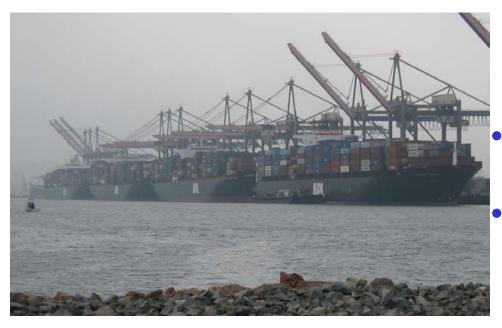


The International Maritime Organization (IMO), a United Nations group of 162 signatory countries, adopted, in December 2002, amendments under the 1974 Safety of Life at Sea Convention (SOLAS) the new International Ship and Port Facility Security Code (ISPS Code).

The code contains mandatory security related requirements for governments, port operators and shipping companies. Each government, port operator and ship must have a security designate, security plan, training and risk assessment as **per international law commenced**1 July 2004.



Key elements of CSI



- Establish security criteria for identifying containers that may pose a risk for terrorism, based on advance information.
 - Pre-screen containers at the earliest possible point.
- Use technology to quickly pre-screen containers that may pose a risk for terrorism.
- Develop secure and "smart" containers.

69 million Trojan Horses





Contract of the Contract of th		
Customs Declaration 19 OFR 12227, 148.12, 148.13, 148.110, 148.111, 1488, 31 OFR 5318 Each arriving traveler or responsible family member a	oust provide t	
nformation (only ONE written declaration per famil	y is required)	
I. Family Name		
First (Girot)	Middle	
2. Birth date Day Month	icar	
3. Number of Family members traveling with you		
4. (a) U.S. Street Address (hotel name/destination)		
(b) City	(c) State	
5. Passport issued by (country)	_	
6. Passport number	(0)	
7. Country of Residence	(0)	
8. Countries visited on this	1	
trip prior to U.S. arrival	V	
9. Airline/Flight No. or Vessel Name		
10. The primary purpose of this typ (bulines)	Yes	No
11. I am (We are) bringing		
(a) fruits, vegetables, plant spot food, insects:	Yes	No
(h) meats, animals, and yallin products:	Yes	No.
(c) disease for cell (db c) snails:	Yes	No
(d) soil or the occupo a farm/ranch/pasture:	Yes	No
12.1 have (We have) been in close proximity of	12517	
(such as touching or fundling) livestock:	Yes	No.
 I am (We are) carrying currency or monetary instruments over \$10,000 U.S. or foreign equival (see definition of monetary instruments on reverse 		No
14. I have (We have) commercial merchandise: (articles for sale, samples used for soliciting orders or goods that are not considered personal effects)	Yes	No
15. Residents — the total value of all goods, merchandise I/we have purchased or acquired for someone else, but not items mailed to the U to the U.S. is:	abroad, (inc	fuding gifts
Visitors — the total value of all articles that including commercial merchandise is:	will remain	in the U.S.,
Read the instructions on the back of this form. Space tems you must declare.		
HAVE READ THE IMPORTANT INFORMATION ON THIS FORM AND HAVE MADE A TRUTHFUL DECL!		SE SIDE OF
X		
(Signifier)	Date Mexico	oth/year)

For Official Use Only

Layers of Security

- Container Imaging
- Radiation Detection
- Container Monitoring –Location & Tamper Evidence
- Manifest Information
- Basic Port/Terminal Security (ISPS Code)

Radiation Detectors - Felixstowe





Radiation Scanning and X-Ray Imaging in Hong Kong....Tractor moving at 16 kmp

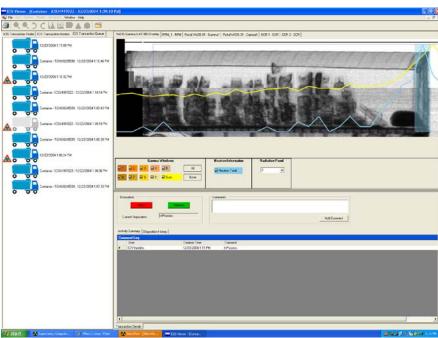
VACIS + OCR Portals ___

RPM + OCR Portals -



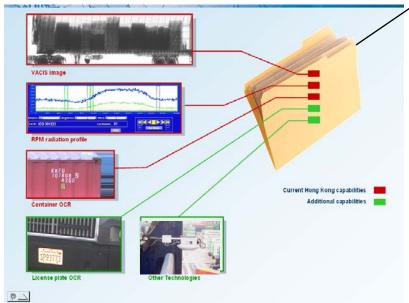
Data Integration

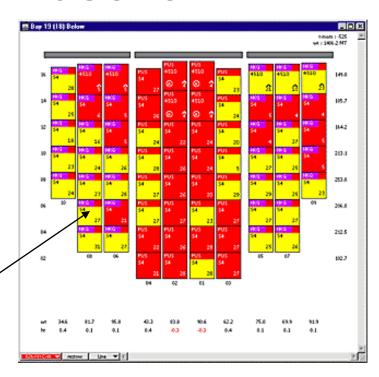




Data Integration Folder for Every Container Onboard







Secure Freight Initiative









SAFE Port Act, Oct '06

Section 208 -

Directs the Secretary to conduct a pilot project at an overseas port similar to the Integrated Container Inspection System being tested at the port in Hong Kong.



9/11 Commission Act, Aug '07 Title XVII - Maritime Cargo Section 1701 - U.S. 100% Container Inspections

- Imaging & Radiation Scanning in Ports prior to arrival in U.S.
- Passed House 371 to 40
- Passed Senate 85 to 8
- Effective July 1, 2012

100 % Scanning Challenges

- Sustainability of the scanning equipment in extreme weather conditions
- Varying costs of transferring the data back to the United States
- Re-configuring port layouts to accommodate the equipment without affecting port efficiency
- Developing local response protocols for adjudicating alarms
- Addressing health and safety concerns of host governments and respective trucking and labor unions
- Identifying who will incur the costs for operating and maintaining the scanning equipment
- Acquiring necessary trade data prior to processing containers and addressing privacy concerns

100% Scanning Challenges

- Concluding agreements with partnering nations and terminal operators to document roles and responsibilities regarding issues such as: ownership, operation, and maintenance of the equipment; sharing of information; and import duty and tax considerations
- Staffing implications for both the foreign customs service and terminal operator
- Licensing requirements for the scanning technology
- Reaching agreement with foreign and industry partners to continue scanning 100 percent of U.S.-bound containers after the pilot ends; and
- Discussing the potential requirements for reciprocal scanning of U.S. exports.





Simulating the Impact of Container Inspections on Port Terminal Operations

Nitin Bakshi, The Wharton School, University of Pennsylvania Noah Gans, The Wharton School, University of Pennsylvania

Month of Data from Hong Kong and Yantian





Present CSI Protocol

- Containers Tagged for Inspection
 - US-bound containers only
 - 24 hours before departure

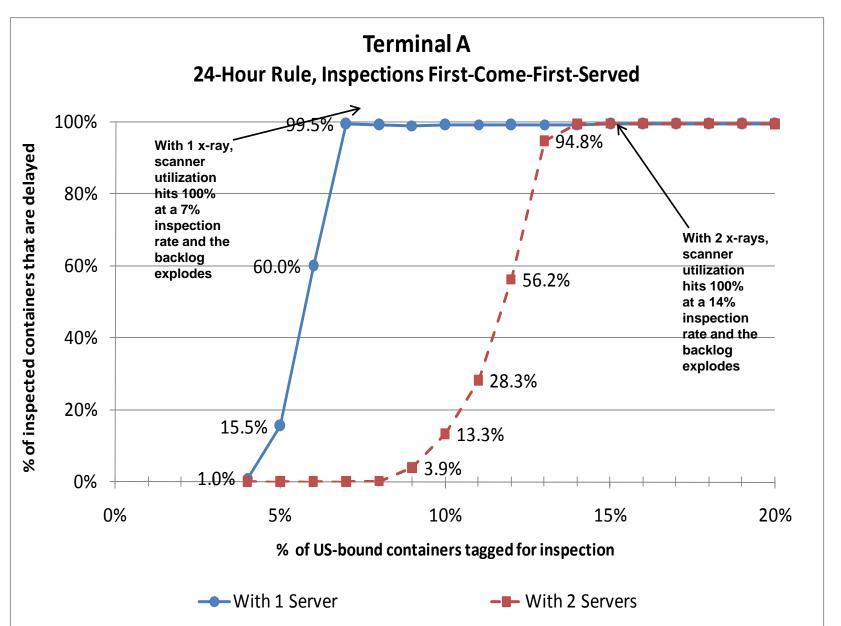


- Inspection process for tagged containers
 - 2 handheld spectroscopic devices per high-energy x-ray radiographic scanner
 - inspections First-Come-First-Served
 - 60 minutes to notify local authorities
 - 40 minutes to pick from stack and transport to inspection station
 - 20 minutes to inspect containers

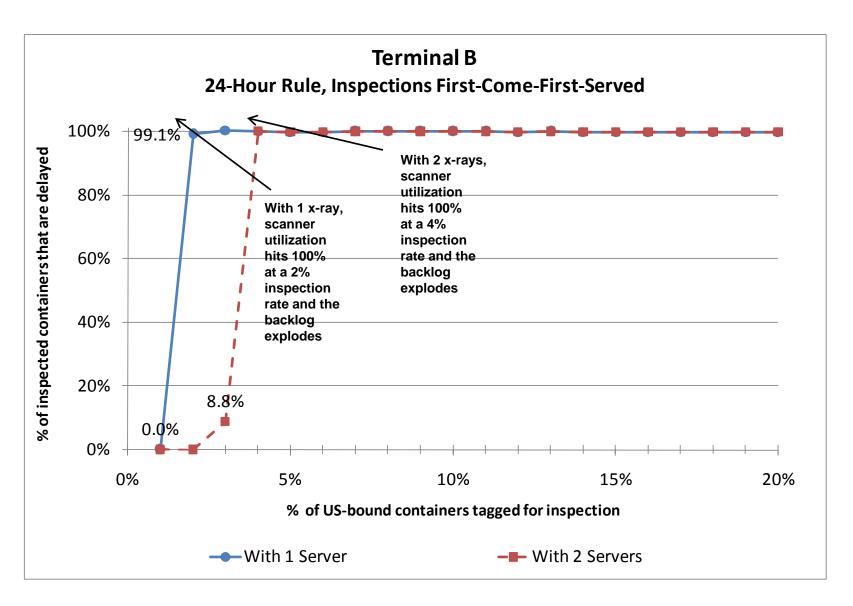
Results for the CSI Protocol

- Percentage of delayed containers
 - With 1 inspection station at Hong Kong
 - a 5% inspection rate is workable
 - at a 7% inspection rate, 100% utilization
 - With 2 inspection stations
 - a 10% inspection rate is workable
 - at a 14% inspection rate, 100% utilization
 - At terminal Yantian the analogues are
 - 1% and 3% for workable rates
 - 2% and 4% for 100% utilization

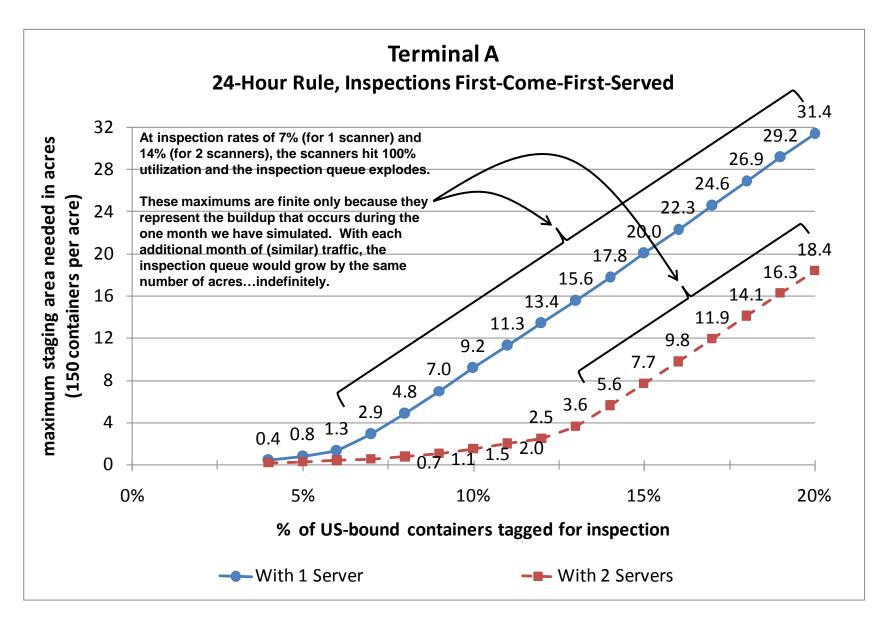
Base case: as inspection rates climb the % delayed explodes



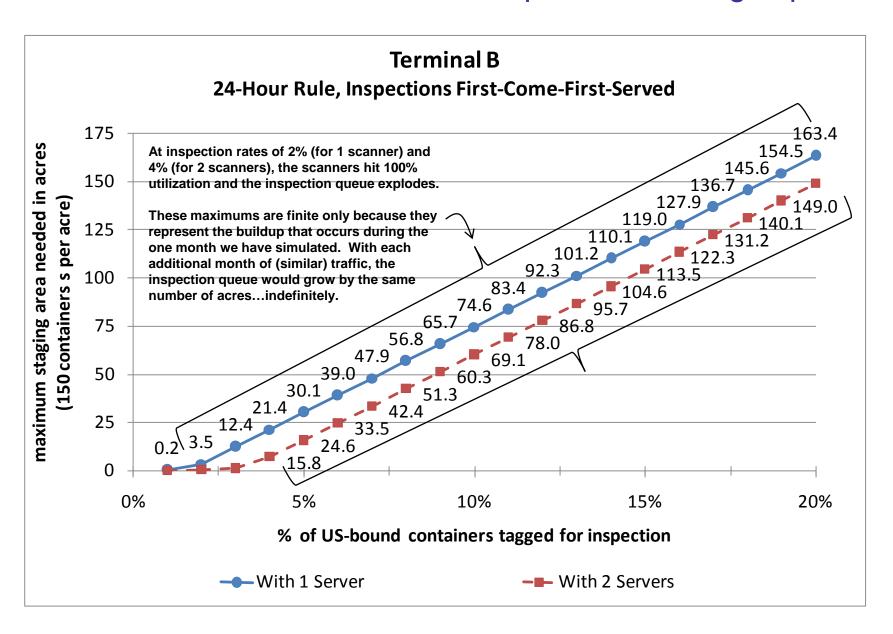
Base case: as inspection rates climb the % delayed explodes



Base case: for utilization ≥ 100% inspection backlog explodes



Base case: for utilization ≥ 100% inspection backlog explodes





FREPORT NEWS

GRAND BAHAMA'S FIRST NEWSPAPER

FRIDAY, AUGUST 28, 2009

Vol 48: No 267© The Nassau Guardian (1844) Ltd

24 PAGES \$0.75

EFFECTIVE SECURITY

Drug interceptions increase at Freeport Container Port; another big bust yesterday

By LEDEDRA MARCHE Senior FN Reporter lededra@nasguard.com

Bahamas and United States Customs along with The Bahamas Drug Enforcement Unit and the U.S. Drug Enforcement Agency intercepted 25 suspected kilos of cocaine at the Freeport Container Port Thursday afternoon, making it the third successful seizure at the transshipment port this month.

Acting on information they had received, authorities conducted a search of a container at the Container Port around 4:00 p.m. and discovered three backpacks which contained the suspected cocaine with a street value of \$550,000.

Officers from the Drug Enforcement Unit are continuing investigations into Wednesday's seizure.

Over the past 18 months, the container terminal — with its interdiction partners, Bahamas and U.S. Customs and Border Patrol agents, the DEA and DEU — has intercepted nearly a metric ton of cocaine.

The success in drug detection in containers that pass through the Freeport Container Port is a result of the new security initiatives, inclusive of electronic surveillance technology, physical perimeter installations and well-trained Bahamian operators and officers, at the 115 acre-site.

(Continued on Page 6)



HIGH DETECTION RATE — Beefed up security measures over the years have contributed to the success of drug detection in containers making their way through the Freeport Container Port.

Layers of Security

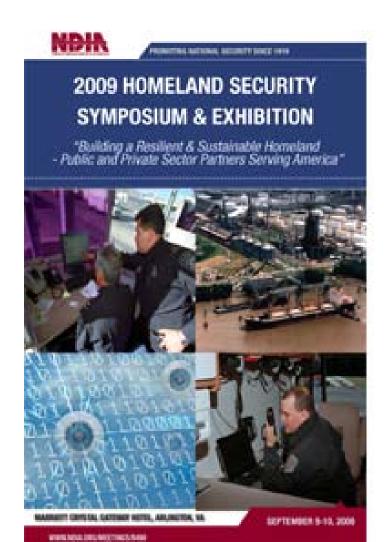
- Container Imaging
- Radiation Detection
- Container Monitoring –Location & Tamper Evidence
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International Supply Chain Vulnerabilities



Gary D. Gilbert
Senior Vice President
Hutchison Port Holdings
9 September 2009





A Proposed Strategy Coordinated Clearance Point of Departure Determination

National Defense Industrial Association 2009 Homeland Security Symposium & Exhibition

> Presented by Jim Phillips September 9, 2009

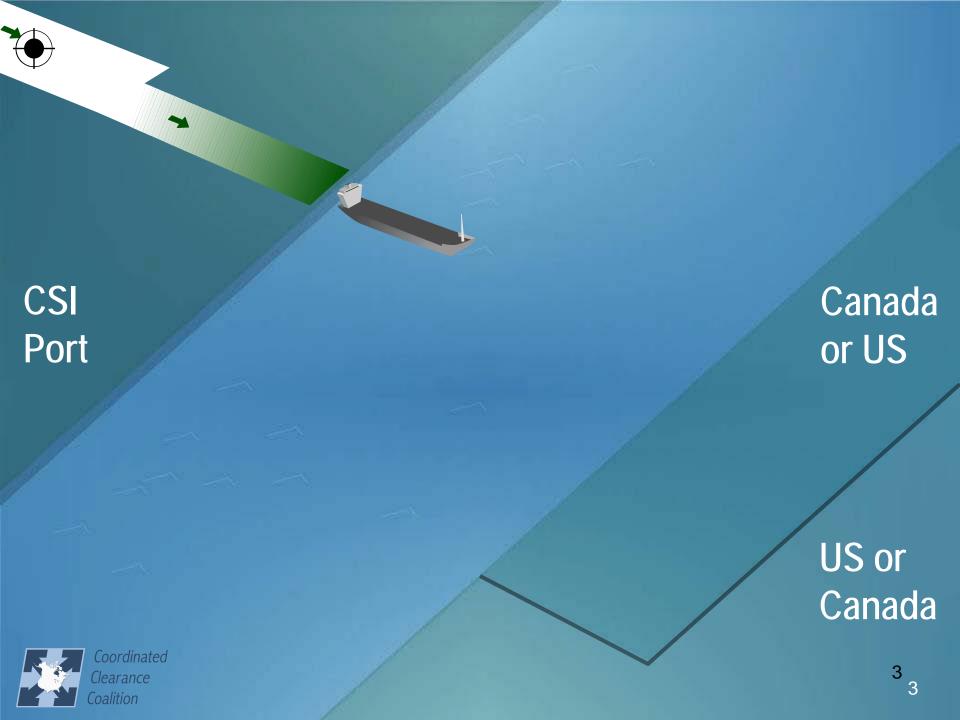


Affiliated with the CAN-AM BTA

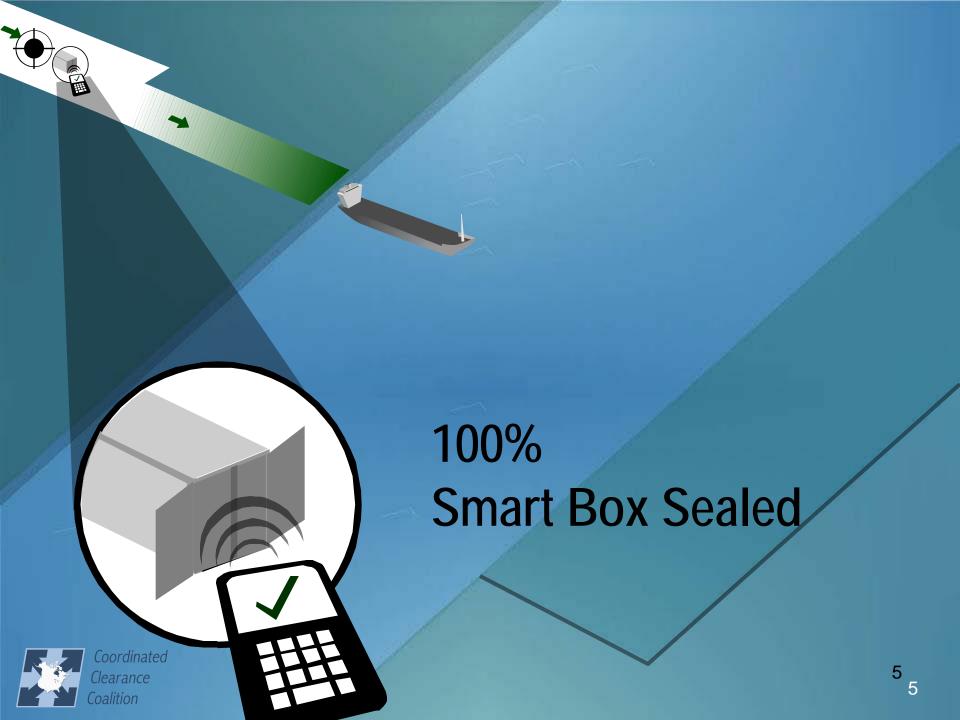
Coordinated Clearance Point of Departure Determination

Goods Movement Concept

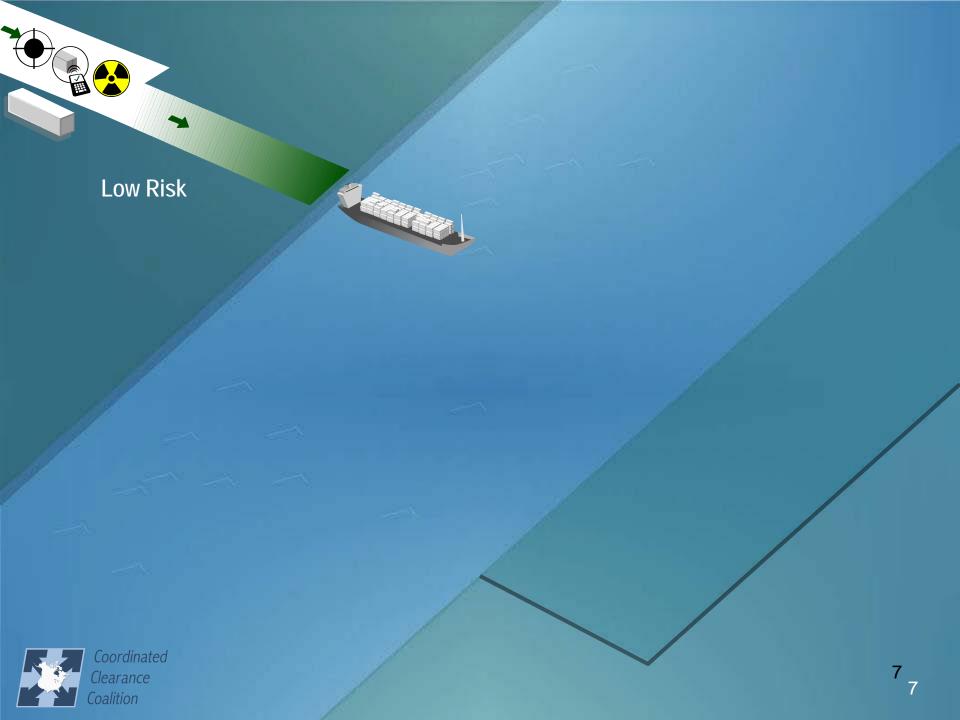


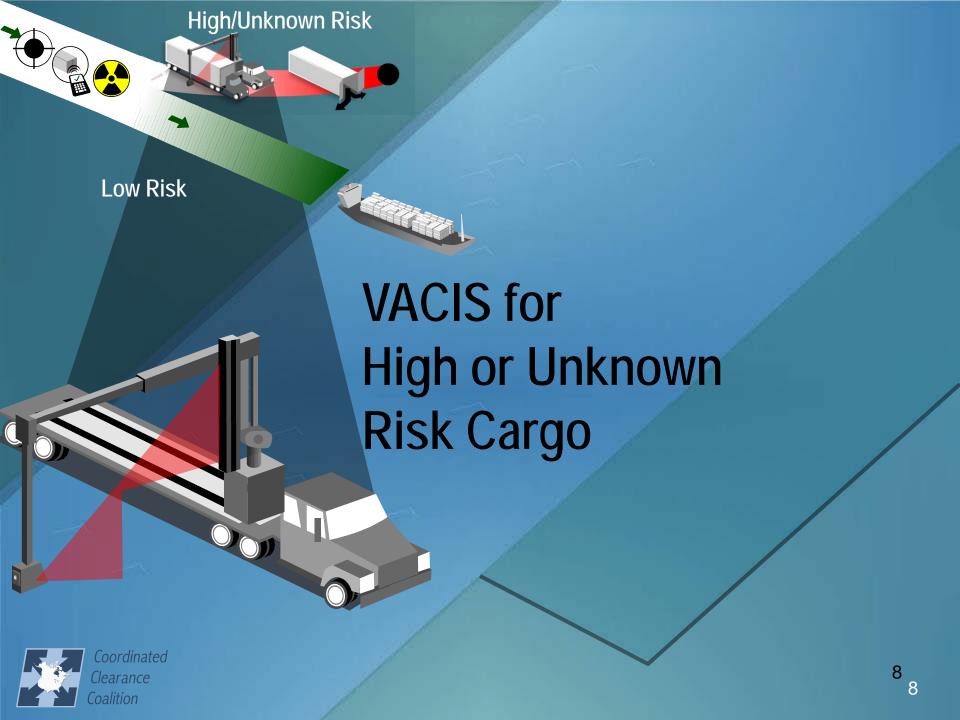


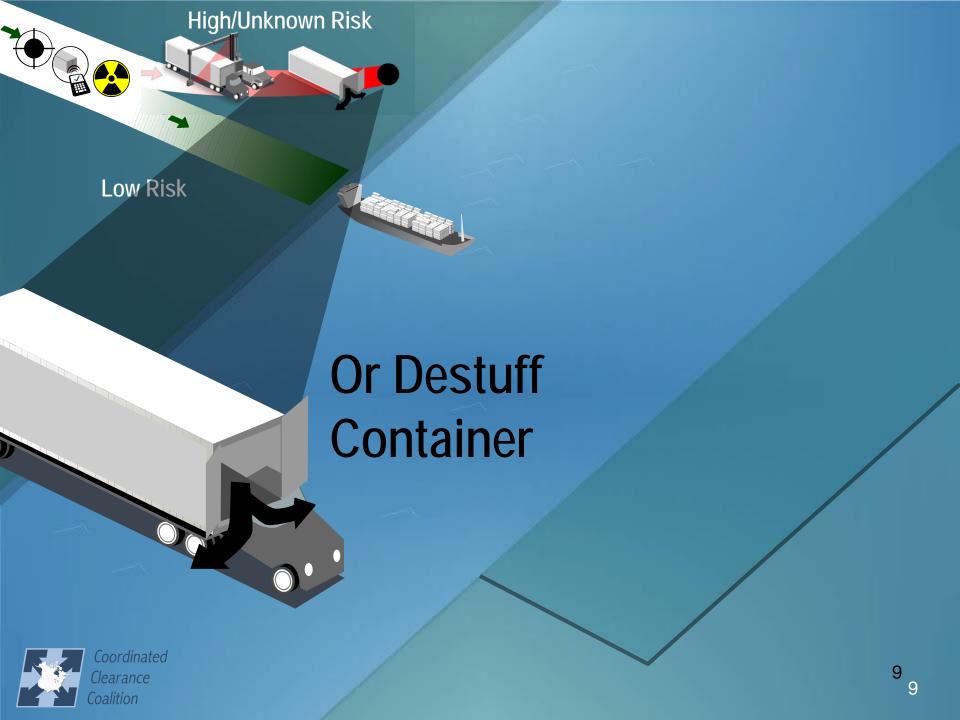


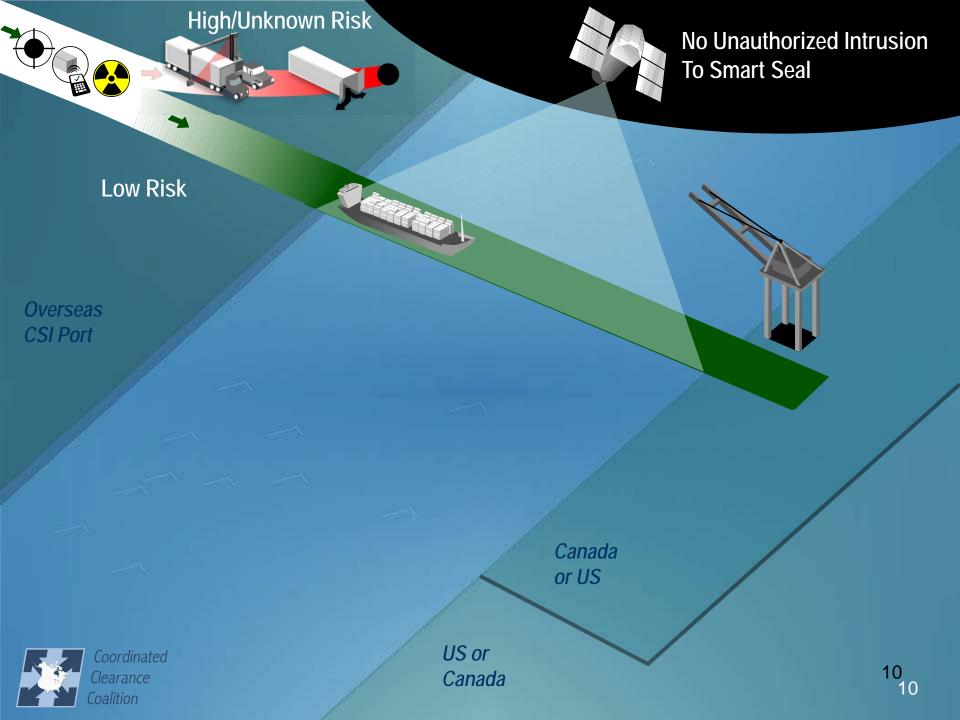


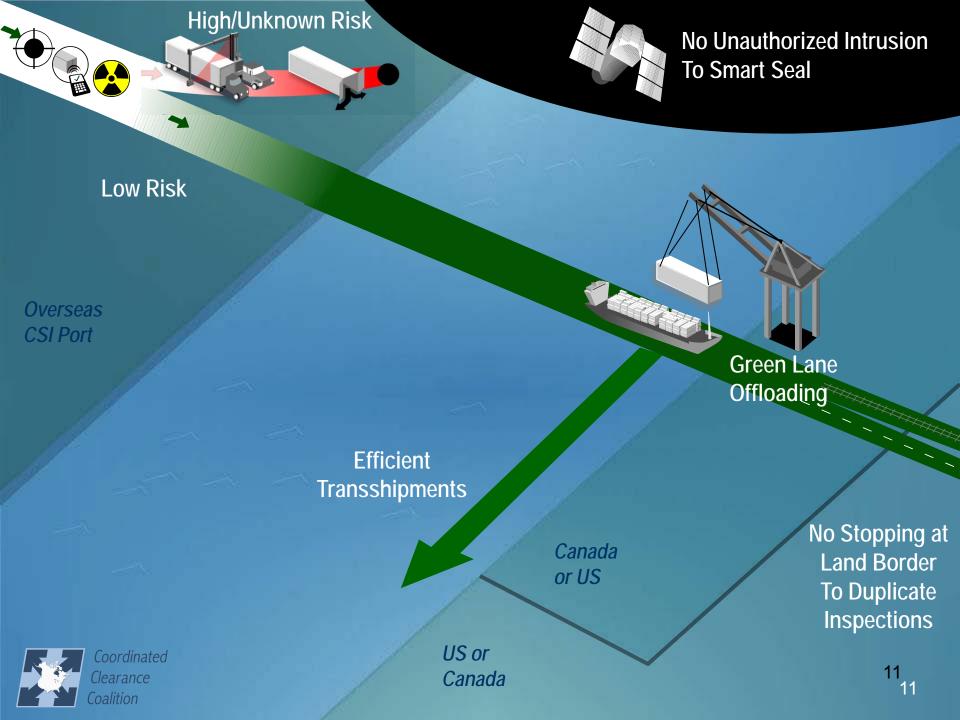












Coordinated Clearance
Point of Departure Determination

Passenger Flow Concept





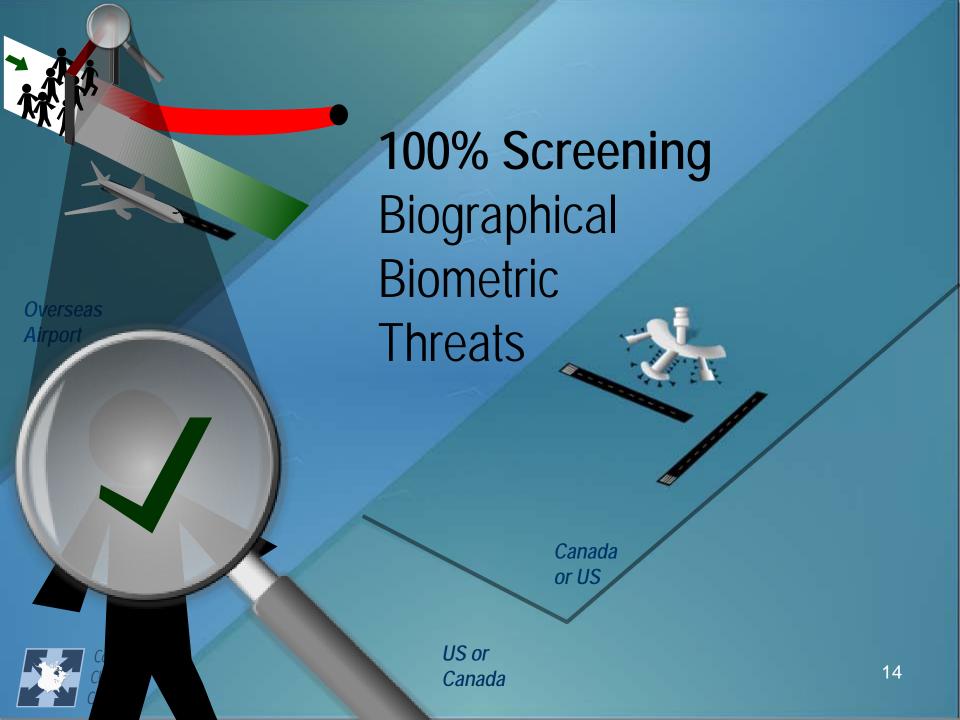


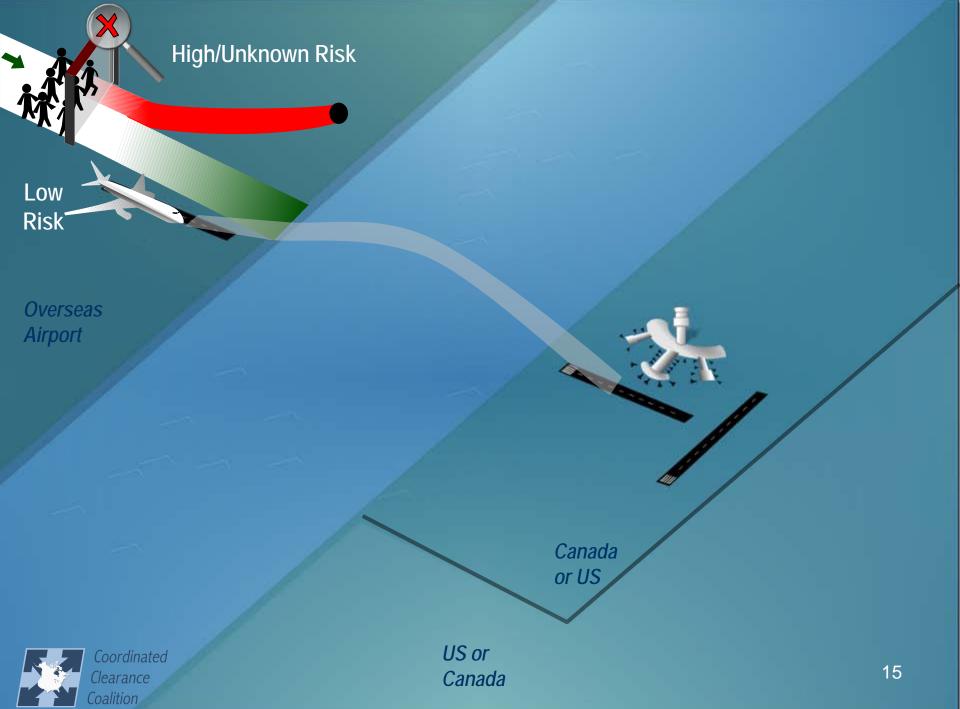


Overseas Airport Canada or US

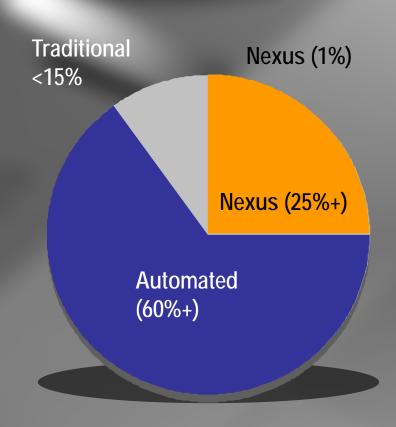




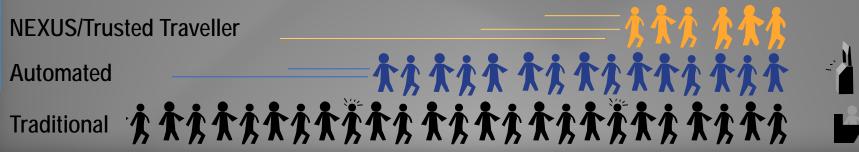


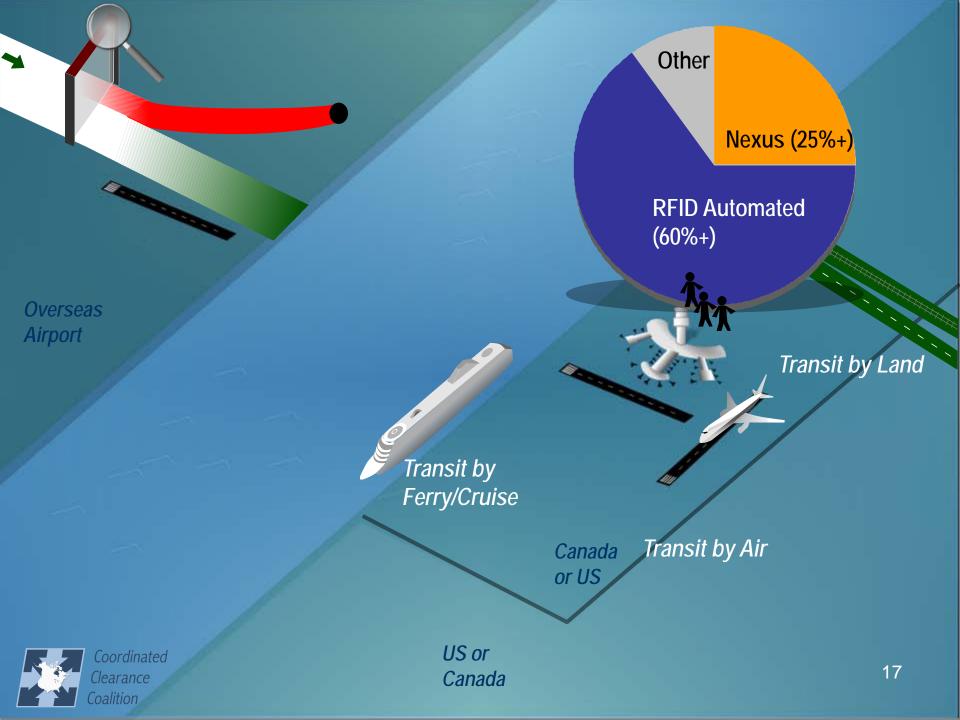


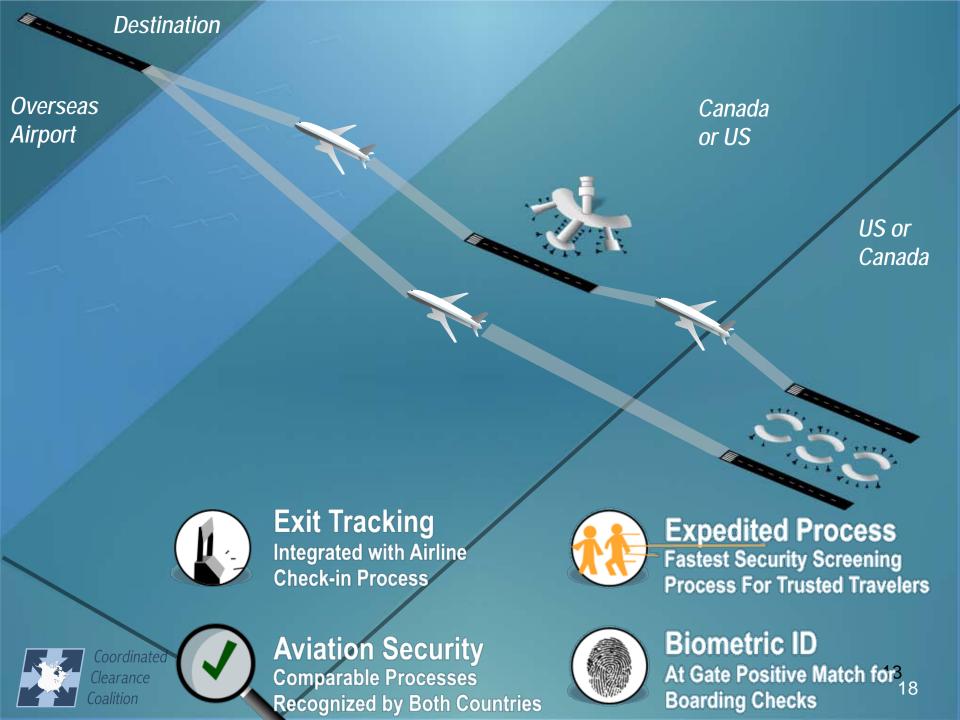
Reinventing the Arrivals Process



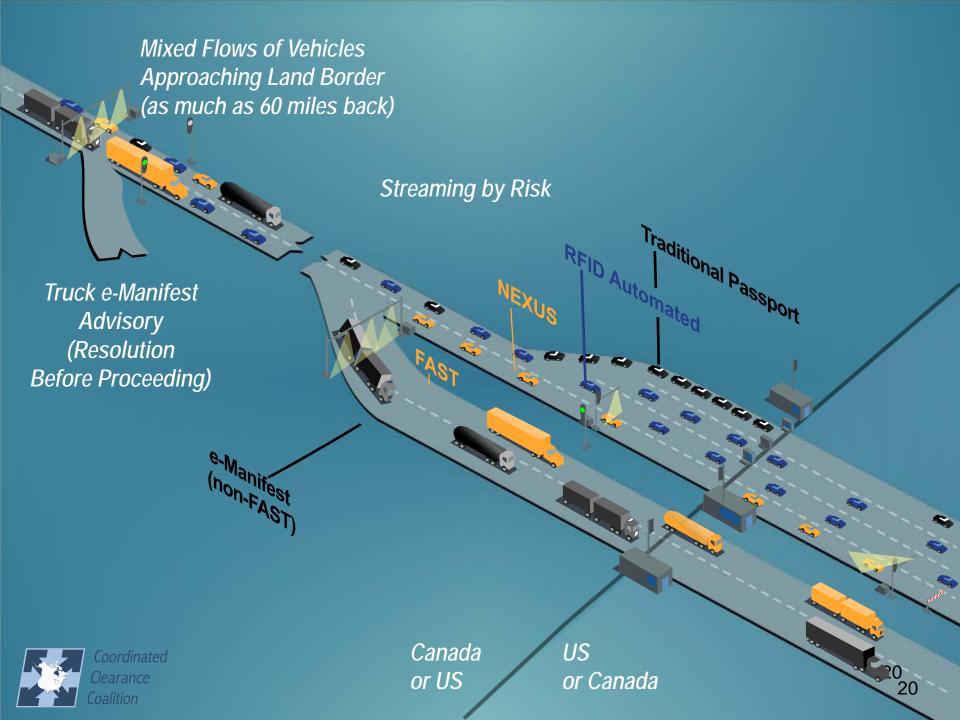








Coordinated Clearance Point of Departure Determination Traffic Streaming



Thank You

For more information:

Jim Phillips 716-754-8824 canambta@aol.com

Gerry Bruno/Solomon Wong 604-717-1800 info@coordinatedclearance.org www.coordinatedclearance.org



TECHNOLOGY Keeping up with the requirements of Homeland Security & Homeland Defense

Presentation by:
Keith Harman, V.P., Engineering,
Senstar Corporation, Canada
September 9, 2009





Ever increasing challenges

- Terrorism
- Criminal activity (Drug trafficking, Smuggling, etc.)
- Illegal immigration

A Race we can not afford to lose!



Rapidly changing technology

- Increased signal processing capabilities (computational power)
- Updated technologies (radar, video, fiber optics etc.)
- Fusion of data from multiple sensors
- New sensor platforms (robots, UAVs, etc.)





Traditional outdoor perimeter security requirements:

DETER

DETECT

Must have all 5 components!

DELAY

ASSESS

RESPOND





Intrusion detection – Sensors classification

Active – Passive

Overt - Covert

Volumetric - Contact

Select a sensor type based on threat and system requirements

Terrain Following – Line of sight

Deployable – Permanently installed (Fixed)

Zone Based – Precise locating





Traditional sensor technologies

Barrier – Taut Wire

Fence sensors — Copper-based acoustic cables

Fiber optic-based

Geophones

Motion switch type

Buried cable — Leaky coaxial cable

zoning

ranging

Pressure tubes

Fiber optics

zoning

ranging

Electric Field — Capacitive

No one panacea!





Traditional sensor technologies (Continued)

Microwave – Bistatic

Monostatic

Infra Red — Active

Passive

Radar – Scanning

short range

No one panacea!

long range

Image Motion — Video

– Thermal





Measures of Performance

Probability of Detection (Pd)

Applies to ALL sensors

Nuisance Alarm Rate (NAR)

Must meet ALL three

False Alarm Rate (FAR)





New technologies – Laboratory vs Field Results

Most new technologies work in the laboratory, BUT in real world there are two technology terminators or challenges:

MOTHER NATURE & HUMAN NATURE









Importance of testing new technologies

There are NO shortcuts!

Products must be tested in numerous environments (climatic and other) during the four seasons with realistic test procedures

The role of professional test agencies like Sandia National Labs, the US Air Force (Eglin C3), The US Army COE, US Navy China Lake, The British Home Office, etc. is critical

Bypassing these tests and going straight to the field almost always leads to disaster – Mother Nature and Human Nature usually win!





Security Approach

Traditional Approach



Typical Canadian Prison

Homeland Security

BORDERS, SEA PORTS, AIRPORTS

Long perimeters in a potentially hostile environment present the challenges of:

Rugged terrain

Land/Water Interface

Vegetation

Animal population

Assessment challenges

Traditional approaches need to be modified





Proven approach to Border Security

Gaza Border

Lebanon Border

Taut Wire Fence Barrier Sensor

Over 700 km of Taut Wire Sensor on Borders Worldwide **Syria Border**

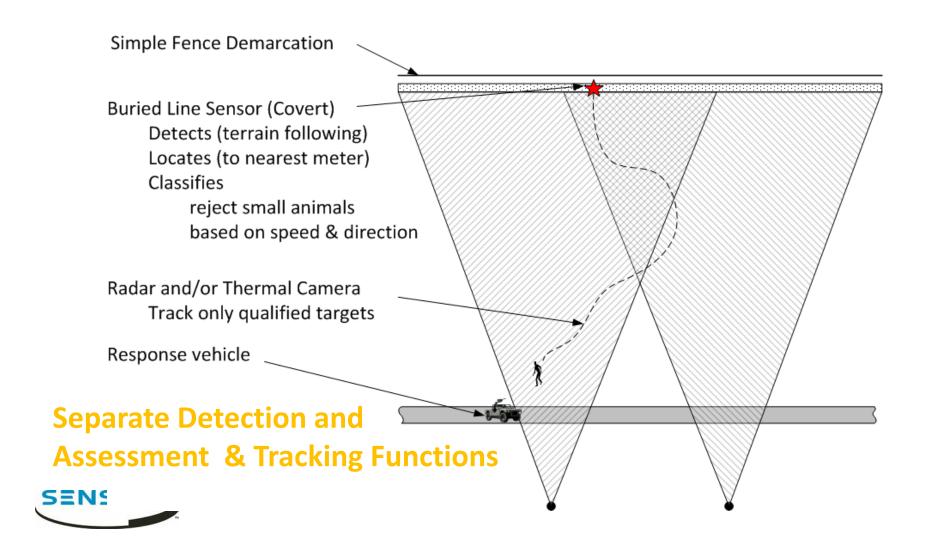
Tailoring the technology to the threat and the environment







Border Security Using "Trip-Line" Sensor





"Trip-Line" Sensor Technology

Sensor Features

Terrain Following

Vegetation Tolerant

Covert

Optimized for the Environment

Discriminate against Small animals

Sensor Performance

Pinpoint Target Location

Direction of Crossing

Target Classification (man, vehicle, etc.)

Technology Candidates

Leaky Cable

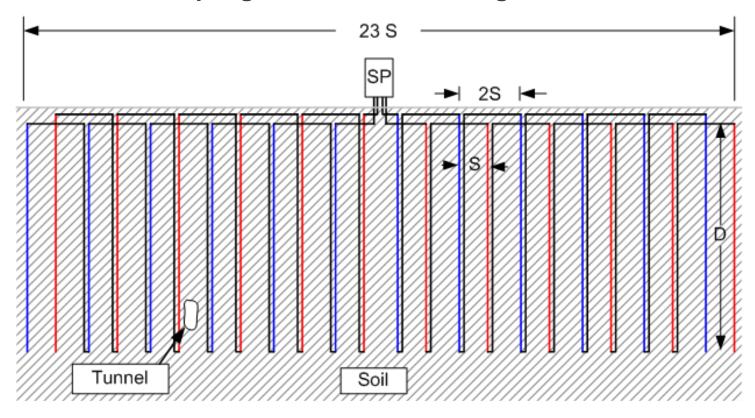
Fiber Optics

Traditional approaches need to be modified





Adapting Traditional Technologies



Leaky Coaxial Cable to Detect Tunnels, Tunneling and Tunnelers





Summary

Mother Nature & Human Nature Challenge

Traditional Technologies have much to offer

Performance Measurements (Pd, NAR, FAR) vital

Importance of Realistic Testing & Test Agencies

Adapting Proven Technologies to address New Requirements

Using New Technology and Innovation while not throwing away the many years of experience in outdoor perimeter security we can and will win the race!





The Role of the National Guard in Homeland Security

Major General Michael Sumrall

Assistant to the Chairman of the Joint Chiefs of Staff for National Guard Matters

- Office of the Assistants to the Chairman of the Joint Chiefs of Staff for National Guard & Reserve Matters (OACJCS/NGRM)
- What is the National Guard?
- National Guard Mission
- National Guard / Department of Homeland Security Relationship
- Case Study: Cessna Boarder Incident
- Case Study: Haifa, Israel
- Questions





Mission

Advise the Chairman, Joint Chiefs of Staff on matters relating to the National Guard and Reserve

We Provide

Timely insights enabled by close relationships with OSD, COCOMs Service staffs, RC Chiefs, and the Joint Staff

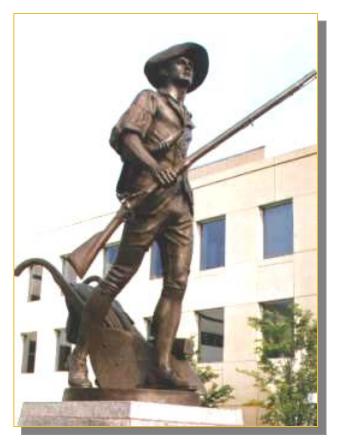
Subject matter expertise on RC matters across the Joint Staff

Balanced perspectives to decision makers concerning the principles, processes, policies, and systems needed for full RC integration and best return on investment

What is Homeland Security?

What is the National Guard?

What is the National Guard



- Oldest organized defensive force of the United States (1636)
- Constitutional Militia in 54 states,
 Territories and DC
- The largest (aggregate) portion of the entire US Reserve Component
- Primary combat reserve component of the United States Army
- The principal, dual-status military force available to both Governors and the President across virtually all mission sets.

National Guard Manpower

-Programmed - 456,000 Total



ArmyNationalGuard

-77%

-350,000

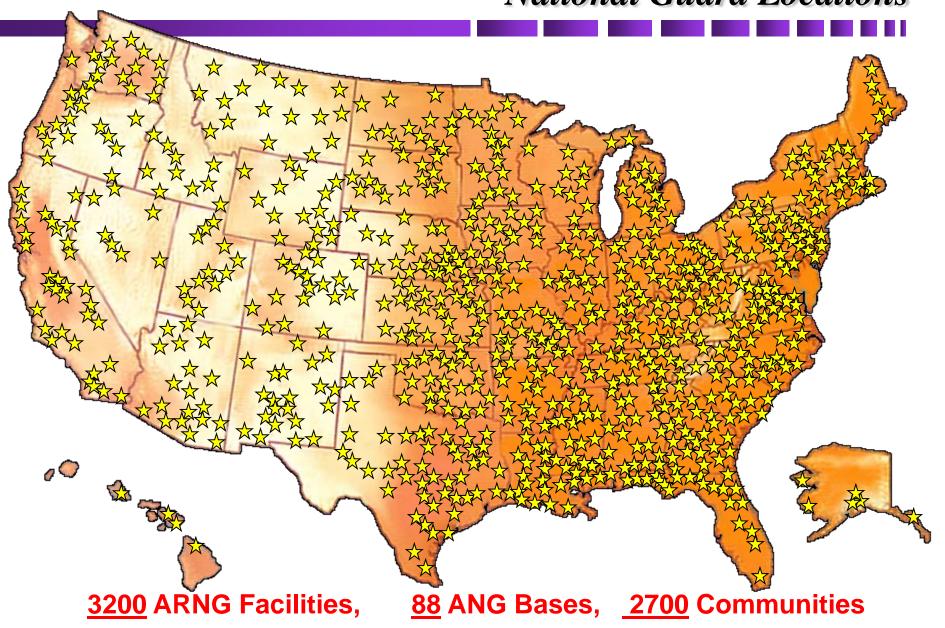
–AirNationalGuard

-23%

-106,000



National Guard Locations



54 States and Territories

National Guard Mission

National Guard's Past History

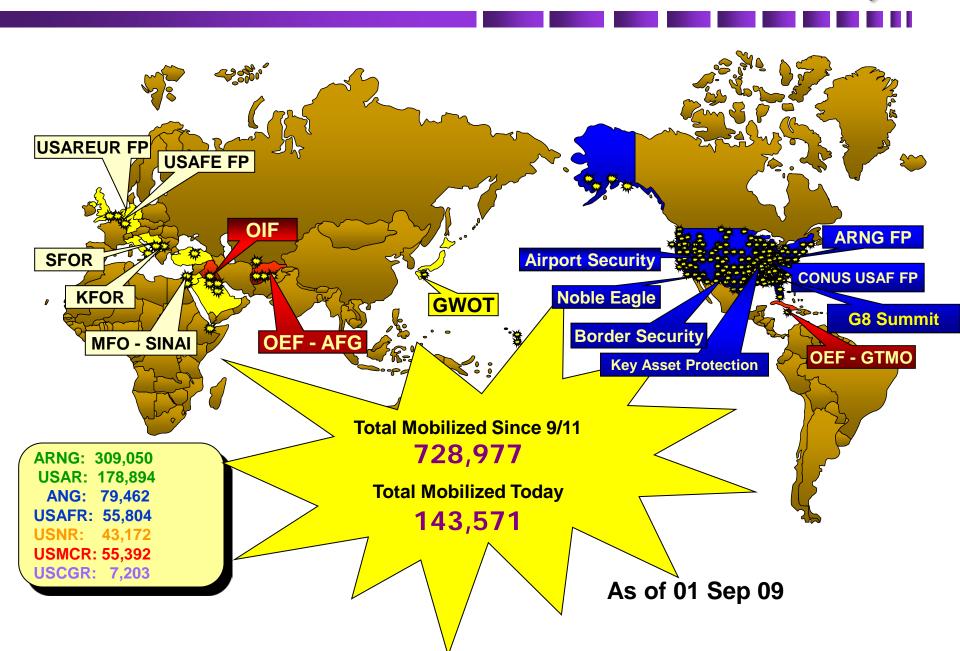


Changing Spectrum of Operations



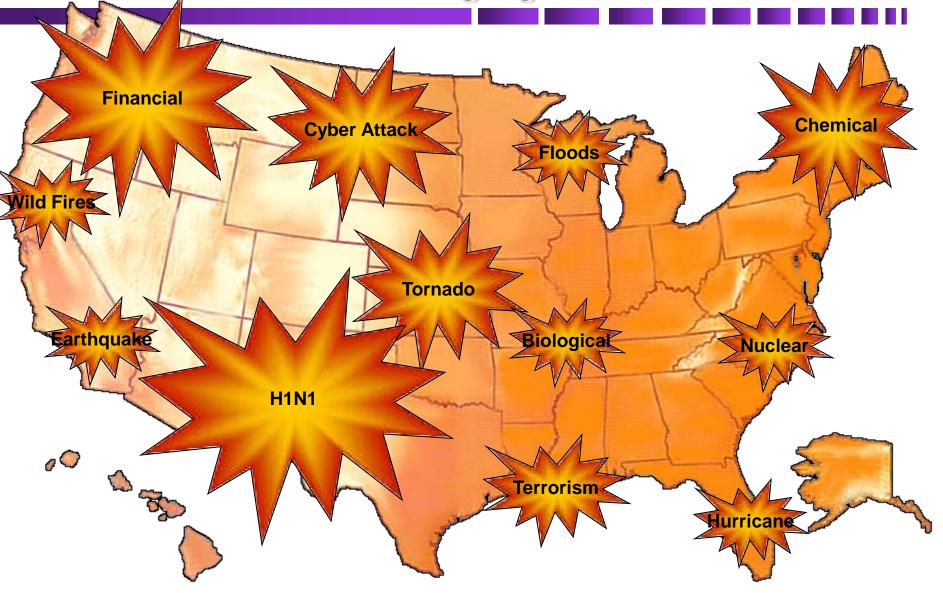
The National Guard uses its unique State andFederal status to operate across the entire spectrum

The new reality ...



National Guard / Department of Homeland Security Relationship

NG and DHS Working together to Prevent Threats



Big Picture



- The Department of Homeland Security (DHS)
 Defines homeland security as "... a concerted
 National effort to prevent terrorist attacks within
 the United States, reduce America's vulnerabilities
 to terrorism and minimize the damage and recover
 from attacks that do occur."
- DHS also states that the Department of Defense's contribution to homeland security is through its military missions overseas, military defense of the homeland and support to military authorities

DHS Critical Missions and Lead Agencies

	FBI	CIA	DOJ	FEMA	DOD	State & Local
INTEL & Warning	X	X			T	2
Border & Transportation	X		(5			0
Domestic Counterterrorism	X	L.	X		7	100
Critical Infrastructure				S	X*	
Catastrophic Threats	T	3		x		X
Emergency Preparedness & Response	3		Mile	X	1	X**

^{*} Infrastructure critical to DOD only

^{**} Includes the NG in a state status (Title 32)

Interstate Assistance



National Guard Domestic Operations



Policies and laws limit federal military forces





READY ALWAYS

Dual Status Policy and Law Comparison

Title 22

-STATE

-FEDERAL

Command & Control	Governor	Governor	President	
Where	Within State or State to State	CONUS	CONUS and Global	
Pay	State	Federal	Federal	
Discipline	State Military Code	State Military Code	UCMJ	
Mission types	- State Domestic Operations - Law Enforcement support within authority of state law	- Federal Training and Missions - Law Enforcement support within authority of state law	- Overseas Training and Federal Missions - Law Enforcement within the U.S. limited by Posse Comitatus Act	

Case Study Cessna Border Incident

- Cessna 172 stolen from airport in Thunder Bay Canada by Adam Dylan Leon
- Flown across the Canadian/US border without clearance
- Detection and response process initiated
- Numerous Federal agencies in both Canada and US contributed to response
- Flight monitored by several US agencies
- Plane landed in Ellsinore, Missouri (Route 60) w/o incident
- Pilot arrested by local authorities

C-172 Stolen from airport in Canada by Adam Dylan Leon



NORAD/NORTHCOM Bi-lateral response



Minnesota ANG F-16 on Alert Scramble to Intercept



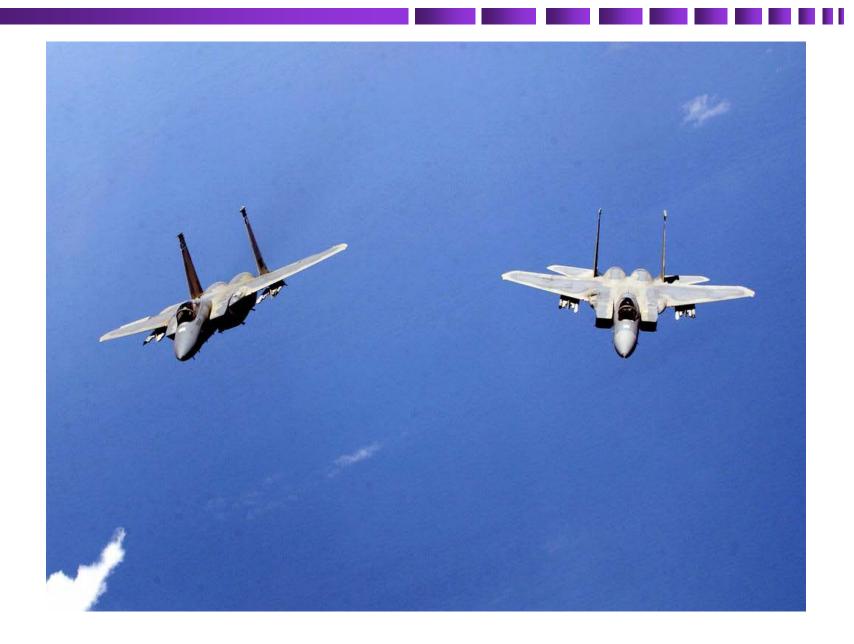
Wisconsin ANG F-16 unit responds as C-172 heads south



Alabama ANG Tanker scrambled to refuel fighters



Louisiana ANG F-15s arrive to relieve F-16s



Police arrest Mr. Leon at a local diner



Timeline of C-172 Incident



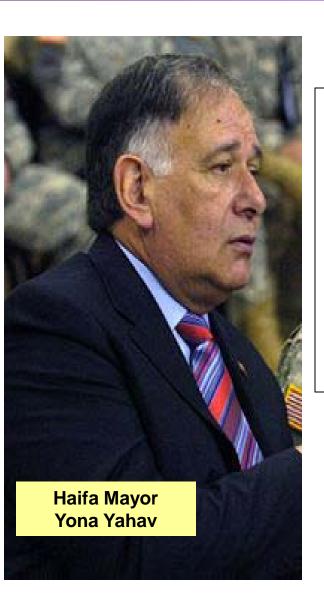
- Rapid response to airspace incursion
- Multiple federal agencies involved
- Various building evacuations resulted
- Fighters monitored and attempted to communicate with pilot
- Tankers provided air to air refueling
- Seamless transition between several ANG units
- Pilot landed without incident

Case Study Haifa, Israel

Map and Aerial View of Haifa

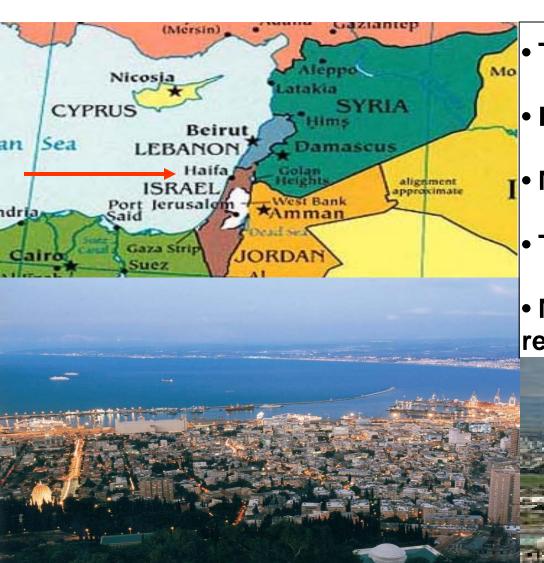


The Attacks Begin – July 2006



- During the first days of the war, Haifa sustained most of the rocket attacks, making the strategic threat real, and completely paralyzing daily life & ensuring the support of basic needs.
- Transportation systems paralyzed
- Grocery stores, public institutions, educational systems, clinics, pharmacies, etc. were shut down.



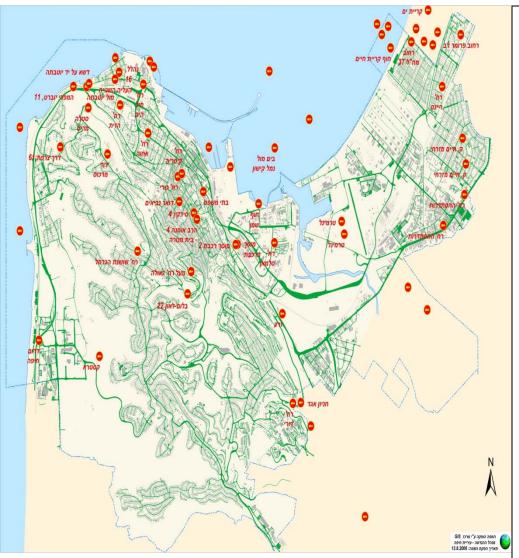


- Third largest city in Israel
- Population 267K
- Major tourist destination
 - Two international universities
 - Major Industrial area and oil refinery

Aftermath Video



The Damage Done: July-August 2006



- 2,700 missiles hit the North of Israel from the outset of the war; 34 of them fell on Haifa
- Twenty-two direct hits were recorded
- 1,182 residential buildings and 404 cars were hit
- Ten people were killed and 61 injured
- Thirty percent of Haifa's inhabitants became refugees in their own country (15,000 of which were children)
- Business and public services were shut down
- Tourism collapsed entirely

The Tools of War



Urban Destruction





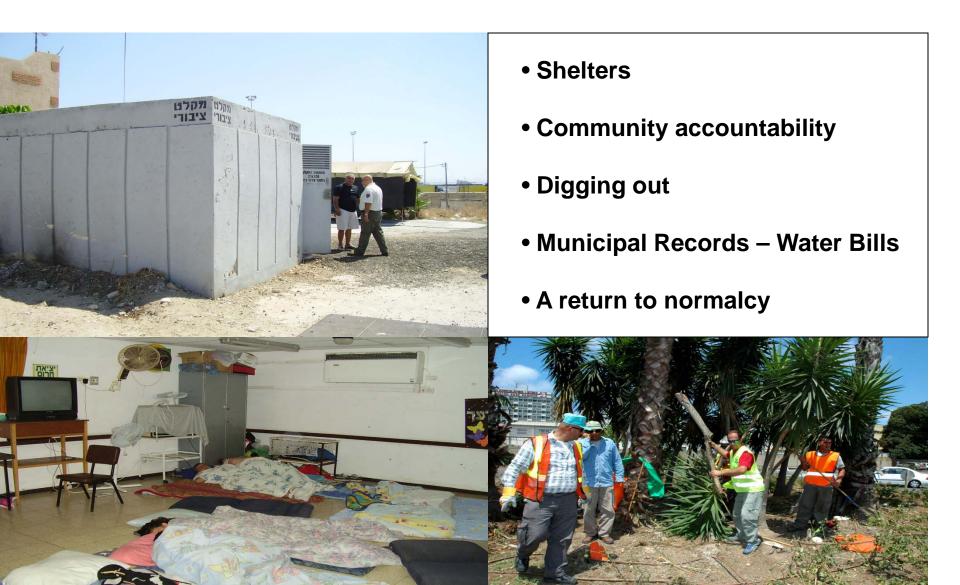


Local Government Reaction



- Mayor Yahav takes control
- Local response, direction, and coordination
- Call center directs the local logistics response
- Local/first responders take the lead
- Federal assistance not required

A Community Comes Together



A Community Comes Together



Aftermath



Haifa Lessons Learned

- Leadership People
- Local Authorities Partners



Topics Discussed

- Office of the Assistants to the Chairman of the Joint Chiefs of Staff for National Guard & Reserve Matters (OACJCS/NGRM)
- What is Homeland Security
- National Guard Mission
- National Guard / Department of Homeland Security Relationship
- Case Study: Cessna Boarder Incident
- Case Study: Haifa, Israel





The Association for Unmanned Vehicle Systems International

CONNECTING THE UNIMANNED SYSTEMS COMMUNITY ACROSS THE GLOBE



Unmanned Systems Force Protection

- Small UAVS
- Medium UAVs
- Ground Vehicles
- Surface Vehicles
- Underwater Vehicles



Unmanned Aircraft Systems

6
planes
that
flew at
USNA
Demo





Small UAS

Boeing's ScanEagle





Aurora's GoldenEye 80



Medium UAS



Schiebel's Camcopter S-100



Cybaero



Boeing's A 160 Hummingbird



Ground Vehicles



Foster-Miller's Dragon Runner and Talon



Boston Dynamics' Big Dog







Surface Vehicles



GDRS' Antisubmarine Warfare USV

Rafael's Protector





Underwater Vehicles



AutoTracker Trial and SeeByte



VideoRay's Pro 4



What are some benefits from utilizing unmanned systems?

- Can do multiple jobs from one investment
 - Security Patrol (24/7 365 days a year)
 - Inventory
 - Environment status
 - Fire
 - Temperature
 - Language interpreter
- Great application to handle escalation of hostility
 - Apply a deterrent
 - Non-Lethal
 - Lethal
- Can save money reduce theft



What stops us from fielding unmanned systems?

- Authority to operate in human environments
 - FAA regulations
 - DOT regulations
 - Coast Guard regulations
- Understanding that safe can not be zero
- Positive Cost Benefit Analysis
- Fear of unmanned systems becoming the Terminator





SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

The Broader View of Homeland Security

Sam Banks sbanks@strtrade.com NDIA Homeland Security Symposium Sept 9, 2009



SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

Homeland Security is not just about terrorism

It is also about vulnerabilities in:

Public Health

Consumer Safety

Economic Security

American Agriculture

Immigration

Contraband

Human Trafficking

American Ecosystems



In the News

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

- H1N1 flu may infect half the U.S. population this year, hospitalize 1.8 million patients and lead to as many as 90,000 deaths... The White House 8/24/09
- 44% of all consumer products are imported but represent over 75% of unsafe product recalls...cpsc
- Contaminated blood thinner from China found in 11 countries and associated with 81 deaths in the United States... NY Times 4/22/08



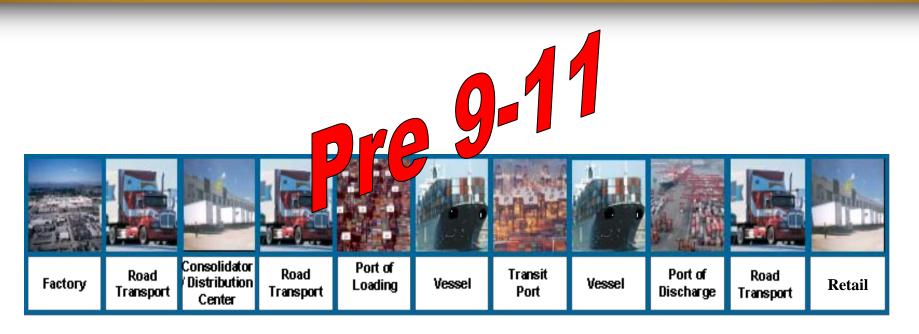
In the News

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

- Since Jan 2008, more than 7,000 Mexicans have died, most connected to the drug trade or law enforcement. Many victims were tortured. Beheadings become common... NY Times 3/22/09
- Estimated that more than 10% of global medical supply chain are counterfeit, and more than 50% in some countries... World Health Organization
- 80% of seafood is imported and accounts for 15% of the US food-borne illness...cpc

Supply Chain Management

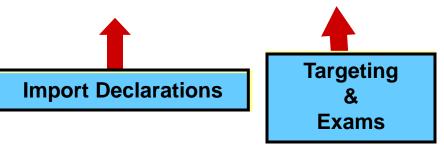
SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.







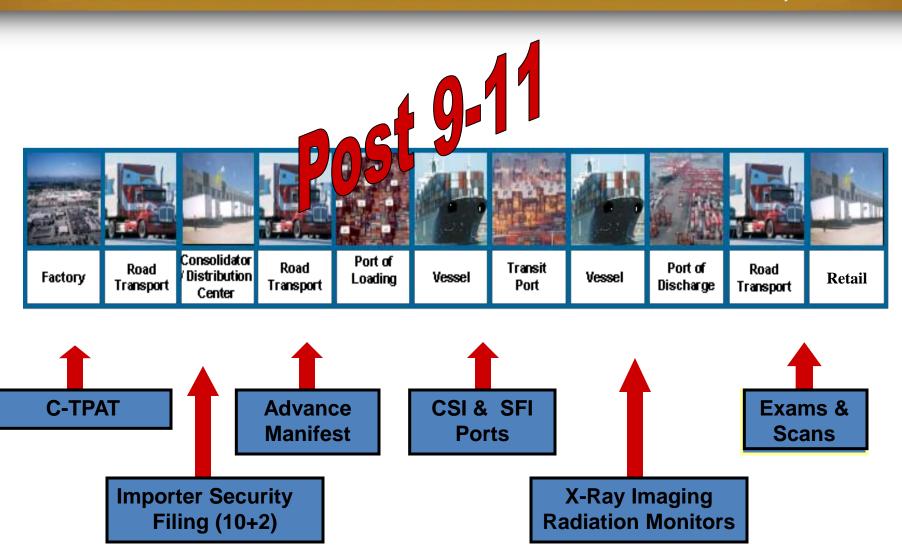
US Customs & Border Protection





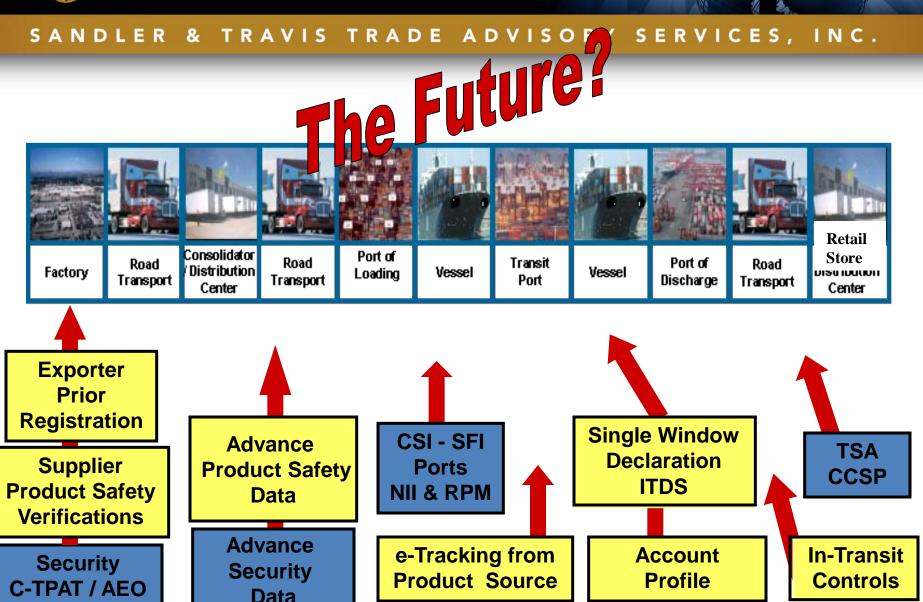
Supply Chain Security Mgmt

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.





STAS Supply Chain – Future Management



STAS The Movement of People

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

Heavily Invested

- Commercial Air and Vessel Passengers
- Land Passengers at ports of entry

Current Investments

- Between the ports
- Detention and removal

Future Investments

- Immigration processes
- Health screening
- Immigration global coordination

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

- Heavily Invested
 - Commercial shipments (sea containers, trucks, rail)
- Current Investments
 - Air cargo security screening
- Future Investments
 - Food safety
 - Product Safety
 - Mail



Conveyances

SANDLER & TRAVIS TRADE ADVISORY SERVICES, INC.

- Heavily Invested
 - Containerized vessels, commercial aircraft, rail
- Current Government Investment
 - Trucks (inbound)
- Future Investments
 - Cars and Trucks (outbound)
 - Vessel break bulk and tankers
 - General aviation
 - Small boats

Introduction to Commercialization at U.S. Department of Homeland Security



2009 Homeland Security Symposium & Exhibition September 9-10, 2009

Thomas A. Cellucci, Ph.D., MBA

Chief Commercialization Officer

Department of Homeland Security

Email: Thomas.Cellucci@dhs.gov

Website: http://bit.ly/commercializationresources

Discussion Guide

- Commercialization Office Overview
- Commercialization Activities at DHS
- SECURE™ and FutureTECH™ Public-Private Partnerships
- Highlights
- Summary



S&T Office of Commercialization

Mission:

To develop and execute programs and processes that identify, evaluate and commercialize technologies that result in widely-distributed products or services that meet the operational requirements of the Department of Homeland Security's operating components, first responders, critical infrastructure/key resources owners and operators and other stakeholders.

Why Commercialization?

The Private Sector is willing and able to use its own money, resources, expertise and experience to develop and produce fully developed products and services for DHS. The Private Sector wants/needs two things from DHS: 1. Detailed Operational Requirements; and 2. a Conservative Estimate of the Potential Available Markets.

Question:

Should DHS solely develop S&T (and products) through an Acquisition Process -- even though DHS' budget is far less than DoD's and DHS has something much more valuable than DoD to offer the Private Sector-- substantial Potential Available Markets?

Commercialization Office: Major Activities

Commercialization Office

Requirements Development Initiative

Initiative

Public-Private Partnerships

- RequirementsDevelopment Book(s)
- Operational Requirements Document Template
- Training for end users and engineers

"Hybrid"Commercialization Model

Commercialization

- Product Realization Chart
- CommercializationFramework and "Mindset"

- •FutureTECH™ (TRL 1-6)
- •SECURE™ (TRL 5-9)
- Concept of Operations
- Website Development
- Internal processes developed and socialized
- Requirements and Conservative Potential Market Available Estimates Communicated

Private Sector Outreach

- Invited Speeches
- Meetings with business executives
- •Numerous articles written and published regarding observations and programs in practice.
- •Repository of currently available products, services and/or technologies in the private sector aligned to Capstone IPT Capability

Gaps



http://www.dhs.gov/xabout/structure/gc 1234194479267.shtm

Big-A Acquisition

- 1. Requirements derived by Government
- 2. RFP and then cost-plus contract(s) with developer(s) (incentivizes long intervals)
- 3. Focus on technical performance
- 4. Production price is secondary Product price is cost-plus
- Product reaches users via Government deployment

Performance is King

Relationship between users and product developer is usually remote

Hybrid Commercialization Process

PHASE

Capstone IPT

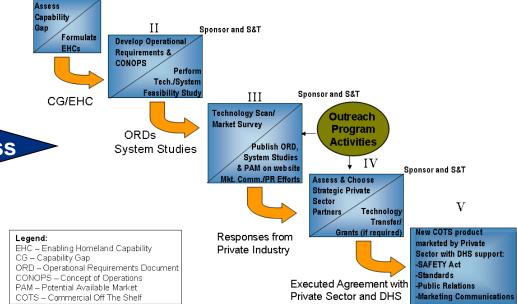
Pure Commercialization

- 1. Requirements derived by Private Sector
- 2. Product development funded by the developer (incentivizes short intervals)
- 3. Technical performance secondary (often reduced in favor of price)
- 4. Focus on price point
- 5. Product price is market-based
- 6. Product reaches users via marketing and sales channels

Performance/Price is King

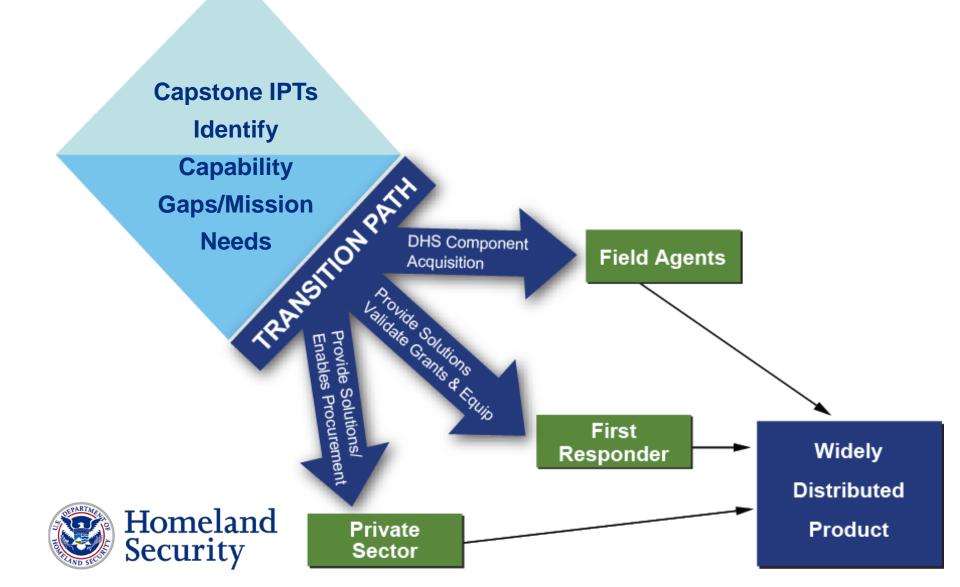
Relationship between end users and product developer is crucial

DHS Hybrid Commercialization Process

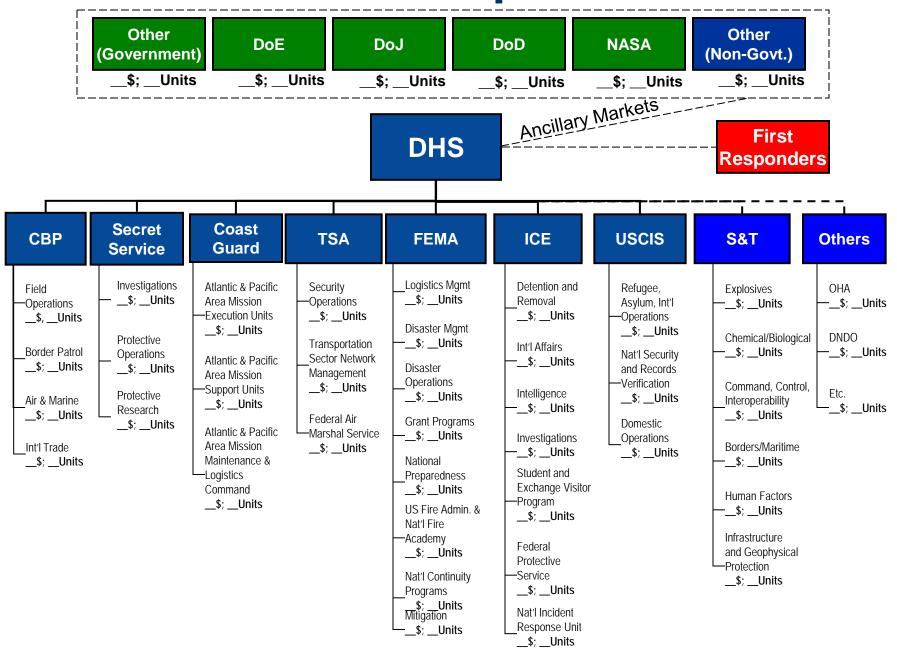


"Commercialization" – The process of developing markets and producing and delivering products or services for sale.

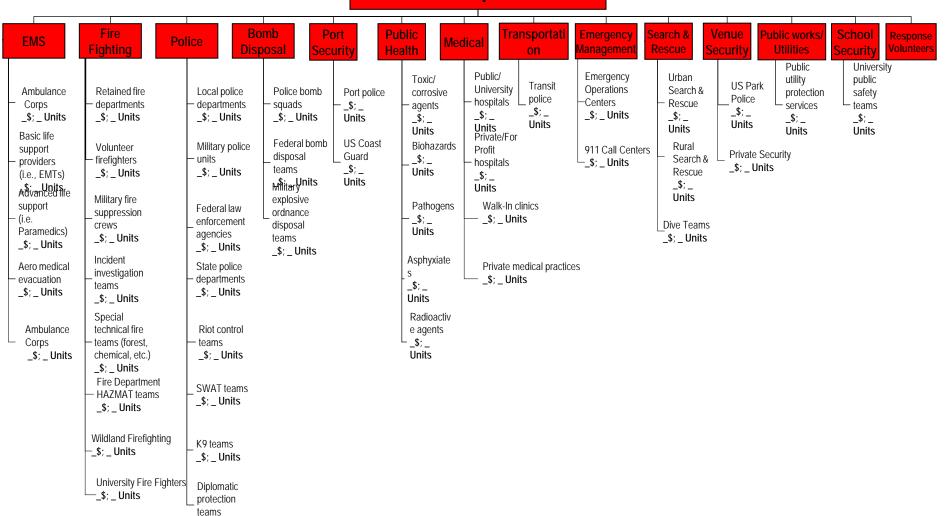
Transition Approaches



Market Potential Template



First Responders



_\$; _ Units

Critical Infrastructure Key Resources (CIKR)

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Agriculture and Food	Defense Industrial Base	Energy	Public Health and Healthcare	National Monuments and Icons	Banking and Finance	Water	Chemical	Commercial facilities	Emergency Services	Materials, Reactors and	Telecommunic ations	Critical Manufacturing	Postal and Shipping Services	Fransportation	Information Technology
Food Food Retail S; _ Units Farm Equipment S; _ Units Meat/Poultry Processing S; _ Units Food Processing S; _ Units Dairy Processing S; _ Units Dairy Farms S; _ Units Carming/Sus Agriculture S; _ Units Traditional Planting S; _ Units Commercial fishing S; _ Units	Defense — Contractors _\$:_ Units Industry — analysts _\$:_ Units Think _ tanks/researc _h institutions _\$:_ Units University _ partnership _ programs _\$:_ Units National — laboratories _\$:_ Units	Coal mining operations _\$; _Units Coal power plants _\$; _Units Coal equipment manufacturers _\$; _Units Hydroelectric _\$; _Units Dam operations _\$; _Units _Wind power _\$; _Units _Solar power _\$; _Units	Public/Univers —ity hospitals _\$:Units Private/For Profit hospitals _\$:Units _Clinics _\$:Units Private medical practices _\$:Units Medical —laboratories _\$:Units Pharmaceutic —al _\$:Units Health —insurance _\$:Units Medicaltechnologys:Unitss:Unitss:Unitss:Unitss:Unitss:Unitss:Unitss:		Credit lending Institutions S; Units Commercial Danking S; Units Consumer Danking S; Units Consumer Danking S; Units Consumer Danking Societies/ Private Danking Societies/ Private Danking Signation Signatio	Public utilities _\$; _Units Desalinization _plants _\$; _Units Treatment _plants _\$; _Units Equipment _manufacturers _\$; _Units Pipe and water control device _manufacturers _\$; _Units	Inorganic chemical production _\$; _Units Organic industria production _\$; _UnitsCeramics\$; _Units Agrochemical\$; _Units Agrochemical\$; _Units	Hotels — _\$; _ Units Shopping	Fire Departments _\$; _ Units Law _ enforcement agencies	Electric -utilities _\$;_Units Reactor and amaterials _\$;_Units University and educational institutions _\$;_Units Control systems _\$;_Units Nuclear safety -systems _\$;_Units Waste disposal services _\$;_Units Uranium -processors _\$;_Units	Telephone/Ce Ilular services _\$; _Units Satellite data - transmission _\$; _Units Broadcasting - entities _\$; _Units Broadcast - equipment - manufacturing _\$; _Units Radio - equipment - manufacturing _\$; _Units Internet - equipment - manufacturing _\$; _Units - High speed - data - transmission - \$; _Units - Firint media _\$; _Units - Print media _\$; _Units - Internet - technology - providers _\$; _Units - Internet - technology - providers _\$; _Units - Internet -	Iron and Steel mills \$: Units Aluminum production and processing \$\tilde{\text{Numinum}} \text{Production} and processing \$\tilde{\text{Structure}} \text{Production} and Power transmission \$\tilde{\text{Structure}} \text{Punits} Motor Vehicle manufacturing \$\tilde{\text{Structure}} \text{Units} Aerospace product & parts manufacturing \$\tilde{\text{Structure}} \text{Units} Tolling stock \$\tilde{\text{Structure}} \text{Units} Other Transportation equipment \$\tilde{\text{Structure}} \text{Units} Other Transportation equipment \$\tilde{\text{Structure}} \text{Units}		AMTRAK _ \$; _ Units Commuter rail _ \$; _ Units Intracity rail _ services _ \$; _ Units Commercial _ ariline _ \$; _ Units Private air _ services _ \$; _ Units Cruise lines _ \$; _ Units Subway _ \$; _ Units Long-haul _ maritime _ shipping _ \$; _ Units Trucking _ \$; _ Units Trucking _ \$; _ Units Freight rail _ service _ \$; _ Units Automobile _ travel _ \$; _ Units Roads, Highways, bridges and tunnels _ \$; _ Units	Hardware providers _\$; _Units IT Conglomerate -\$ _\$; _Units Semiconducto r production _\$; _Units Electronics manufacture _\$; _Units _IT services _\$; _Units _IT services _\$; _Units _IT services _\$; _Units _IT services _\$; _Units _Server and network — hardware _\$; _Units _Software _production _\$; _Units _Gaming _\$; _Units _Gaming _\$; _Units _Information _security _\$; _Units _\$ Semiconducto _r equipment _\$; _Units
					Venture capital \$: Units										

SECURETM Program

Developing Solutions in Partnership with the Private Sector

- 'Win-Win-Win" Public-Private
 Partnership program benefits DHS's
 stakeholders, private sector and –most
 importantly- the American Taxpayer
- •Saves time and money on product development costs leveraging the freemarket system and encouraging the development of widely distributed products for DHS's stakeholders
- •Detailed articulation of requirements (using MD 102-01 ORD template) and T&E review provides assurance to DHS, First Responders and private sector users (like CIKR) that products/services perform as prescribed



http://www.dhs.gov/xres/programs/gc_1211996620526.shtm

FutureTECHTM Program

Addressing the Future Needs of DHS

- 'Win-Win-Win" Public-Private
 Partnership program benefits DHS
 stakeholders, private sector and –most
 importantly- the American Taxpayer
- •5W template provides detailed overview of Critical Research/Innovation Focus Areas
- •Critical Research/Innovation Focus Areas provide universities, national labs and private sector R&D organizations insight into the future needs of DHS stakeholders
- Partnership program encourages R&D organizations to work on development of technology solutions up to TRL-6 to address long-term DHS needs.



http://www.dhs.gov/xres/programs/gc_1242058794349.shtm

Public-Private Partnerships

Benefit Analysis "Win-Win-Win"

Taxpayers	Private Sector	Public Sector
Citizens are better protected by DHS personnel using mission critical products	1.Save significant time and money on market and business development activities	Improved understanding and communication of needs
2. Tax savings realized through Private Sector investment in DHS	2. Firms can genuinely contribute to the security of the Nation	2. Cost-effective and rapid product development process saves resources
3. Positive economic growth for American economy	3. Successful products share in the "imprimatur of DHS"; providing assurance that products really work	3. Monies can be allocated to perform greater number of essential tasks
4. Possible product "spin-offs" can aid other commercial markets	4. Significant business opportunities with sizeable DHS and DHS ancillary markets	4. End users receive products aligned to specific needs
5. Customers ultimately benefit from COTS produced within the Free Market System – more cost effective and efficient product development	5. Commercialization opportunities for small, medium and large business	5. End users can make informed purchasing decisions with tight budgets

Commercialization Office Highlights:

- White House Office of Science and Technology Policy briefings (Chief Technology Officer Aneesh Chopra)
- Homeland Security Council: Recommended priority for FY11-15 for transportation security: SECURE Program
- Homeland Security Advisory Council, Essential Technology Task Force Report, June 2008
- Council on Competitiveness, Chief Commercialization Officer is first Federal Government Representative
- "Big Bang Economics": CNN Feature Video with Jeanne Meserve
- •Two Federal Certification Programs developed and implemented— SECURE™ and FutureTECH™: Innovative public-private partnerships
- Published Five books (and more than 20 articles) on requirements development and public-private partnerships
- Commercialization Office websites have highest number of page visits and longest dwell time (over 17 minutes) of all S&T Directorate websites

Summary

- Commercialization can be viewed as a "Win-Win-Win" approach to developing capabilities for DHS stakeholders
- Innovative public-private partnerships offer alternative to traditional Acquisition activities at "Obtain" phase
- Increase speed-of-execution and net realizable budget for DHS, extendable to other federal agencies

Questions and Answers

U.S. Department of Homeland Security: Science and Technology Directorate's Chief Commercialization Officer

Dr. Cellucci accepted a five-year appointment from the Department of Homeland Security in August 2007 as the Federal Government's first Chief Commercialization Officer (CCO). He is responsible for initiatives that identify, evaluate and commercialize technology for the specific goal of rapidly developing and deploying products and services that meet the specific operational requirements of the Department of Homeland Security's Operating Components and other DHS stakeholders such as First Responders and Critical Infrastructure/Key Resources owners and operators. Cellucci has also developed and continues to drive the implementation of DHS-S&T's outreach with the private sector to establish and foster mutually beneficial working relationships to facilitate cost-effective and efficient product/service development efforts. His efforts led to the establishment of the DHS-S&T Commercialization Office in October 2008. The Commercialization Office is responsible for four major activities; a requirements development initiative for all DHS stakeholders, the development and implementation of a commercialization process for DHS, development and execution of private sector partnership programs such as SECURE and leading the private sector outreach for the S&T directorate.

Since his appointment, he has published three comprehensive guides [Requirements Development Guide (April 2008), Developing Operational Requirements (May 2008), and Developing Operational Requirements, Version 2 (November 2008)] dealing with the development of operational requirements, developed and implemented a commercialization model for the entire department and established the SECURE Program—an innovative public-private partnership to cost-effectively and efficiently develop products and services for DHS's Operating Components and other DHS stakeholders. In addition, he has written over 25 articles and a compilation of works [Harnessing the Valuable Experiences and Resources of the Private Sector for the Public Good, (February 2009)] geared toward the private sector to inform the public of new opportunities and ways to work with DHS. Cellucci has received recognition for his outreach efforts and engagement with the small and disadvantaged business communities who learn about potential business opportunities and avenues to provide DHS with critical technologies and products to help secure America. Cellucci is an accomplished entrepreneur, seasoned senior executive and Board member possessing extensive corporate and VC experience across a number of worldwide industries. Profitably growing high technology firms at the start-up, mid-range and large corporate level has been his trademark. He has authored or coauthored over 139 articles on Requirements development, Commercialization, Nanotechnology, Laser physics, Photonics, Environmental disturbance control, MEMS test and measurement, and Mistake-proofing enterprise software. He has also held the rank of Lecturer or Professor at institutions like Princeton University, University of Pennsylvania and Camden Community College. Cellucci also co-authored ANSI Standard Z136.5 "The Safe Use of Lasers in Educational Institutions". Dr. Cellucci is also a commissioned Admiral and Commander of a Squadron in Texas responsible for civil defense and has been a first responder for over twenty years. As a result of his consistent achievement in the commercialization of technologies, Cellucci has received numerous awards and citations from industry, government and business. In addition, he has significant experience interacting with high ranking members of the United States government—including the White House, US Senate and US House of Representatives—having provided executive briefs to three Presidents of the United States and ranking members of Congress. Cellucci represents DHS as the first Federal Government member on the U.S. Council on Competitiveness.

Cellucci earned a PhD in Physical Chemistry from the University of Pennsylvania, an MBA from Rutgers University and a BS in Chemistry from Fordham University. He has also attended and lectured at executive programs at the Harvard Business School, MIT Sloan School, Kellogg School and others. Dr. Cellucci is regarded as an authority in rapid time-to-market new product development and is regularly asked to serve as keynote speaker at both business and technical events.



Homeland Security